# **Small Actions Upstream**

A study of public attitudes toward fresh water resources and pollution prevention in the Huron River watershed.

Sponsored by the Middle Huron Stormwater Advisory Group and the Livingston Watershed Advisory Group.

**Huron River Watershed Council 2012** 



Protecting the river since 1965

# Middle Huron Stormwater Advisory Group (SAG) Livingston Watershed Advisory Group (WAG)

The Middle Huron SAG and the Livingston WAG are coalitions of organizations that work collaboratively with regional partners to coordinate and implement best management practices that improve the quality of and manage the volume of polluted urban runoff entering the Huron River system.

Current SAG and WAG activities include monitoring water quality and stream habitat, coordinating efforts to address state-listed water body impairments, and implementing watershed-wide public education to raise awareness about the problems caused by polluted runoff.

The **Middle Huron SAG** is made up of ten local municipalities and agencies within the middle section of the Huron River watershed which lies mostly within Washtenaw County, extending from Portage Lake downstream to the French Landing Dam, which forms Belleville Lake.

Middle Huron SAG members:
Washtenaw County Water Resources Commissioner
Washtenaw County Road Commission
Village of Dexter
City of Ann Arbor
Pittsfield Township
City of Ypsilanti
Ypsilanti Township
Eastern Michigan University
Ann Arbor Public Schools

The **Livingston WAG** is made up of six local municipalities and agencies. It was originally formed to develop watershed management plans for the Huron Chain of Lakes and Upper Shiawassee River watersheds in Livingston County.

Livingston WAG members:
Livingston County Drain Commissioner
Livingston County Road Commission
City of Brighton
Brighton Township
Village of Pinckney

## Dear Regional Leader,

Because of many years of effort by leaders and citizens across our region to restore our precious Huron River and its tributaries, we can point to some progress. The Huron is known to be one of the healthier urban watersheds in the state of Michigan.

However, it is not without problems. Unnatural hydrology (stream flow) degrades habitat in our streams and impacts wildlife in them and downstream lakes. Many of our urban streams are high in bacteria, excessive nutrients and other pollutants.

These problems can seem intractable when you consider that one of the biggest contributors to water pollution in this region is non-point source runoff—in other words, contaminants flowing off hundreds of thousands of parking lots, lawns, streets, and rooftops. Uncontrolled runoff continues to alter stream hydrology and habitat and carry pollutants into our waterways.

The Middle Huron Stormwater Advisory Group (SAG) and the Livingston Watershed Advisory Group (WAG) represent fourteen organizations that are working alongside the Huron River Watershed Council (HRWC) to change that. The two groups commissioned the following research into public attitudes about stormwater because this problem must be addressed if we are to secure safe, clean water for both humans and wildlife.

We recognize that this is no easy task. Municipalities now find themselves debating new stormwater permits and contemplating ways to manage contaminated runoff by maintaining and improving grey infrastructure and implementing large scale stream restoration and green infrastructure projects. Yet these efforts are only part of the solution.

Residents must also be widely engaged. Collectively, modest individual actions add up to a big impact on our region's waters—actions like picking up pet waste, disposing of oil and paint properly, planting native plants and using less fertilizer.

HRWC, a nonprofit organization dedicated to protecting and restoring the Huron River, conducted this research through an online survey of public beliefs and concerns. Our work has uncovered: what the public knows about runoff; how much the public values healthy water; and the ways in which citizens are most likely to help.

The survey results provide an understanding of the public education efforts that have been working and lay the foundation for future outreach that can truly bring about change. Our plans are to use this feedback to invigorate community conversations, about how we can protect our area's most important fresh water resources.

This report is the first step but also shows a job well done. Thank you for your interest and engagement.

Sincerely,

Ric Lawson
Watershed Planner
Huron River Watershed Council

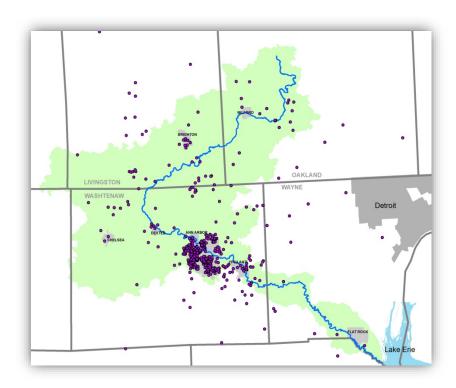
### **EXECUTIVE SUMMARY**

This report summarizes the findings of a recent study of public attitudes about the quality of local water resources and stormwater impacts in Washtenaw and Livingston counties. Our intent was two-fold. First we wanted to understand what residents in the watershed think about issues related to nonpoint source runoff pollution and what they might be willing to do in their everyday lives to address it. As part of this, we wanted to compare to past results to see how these attitudes have changed. Second we hoped to measure whether the regular public education activities of HRWC and the participating communities is reaching and motivating residents to help.

With an eye toward keeping the project cost effective, the survey was conducted via a web survey instrument. Participation was recruited through the 2012 Watershed Community Calendar, e-mail, print and web advertising, direct in-person contact and social media. The 38 survey questions, taking approximately ten minutes to answer, were designed to reasonably compare with two previous surveys, the Southeast Michigan Council of Governments (2004 Regional Water Quality Survey) and the Oakland County Water Resources Commissioner's Office (2008 Community Attitude and Interest Survey).

## Who took the survey?

741 residents in total completed our survey (Washtenaw County – 572; Livingston County – 41; Oakland County – 46; and folks who reported their zip code as beyond our watershed boundary made up the rest.



Most of the respondents were White (86%) with other races represented (Asian/Pacifica Islander 3.8%, Black/African American 1.5%, American Indian Eskimo 1.8%, and Other 3.4%).

Almost 60% of respondents were between the ages of 45-64. In the oldest age group (65+) there were fewer responses (14%) and fewer responses from younger residents 35-44 (14%); 25-34 (10%); under 25 (3.3%).

Many respondents reported their annual household income as between 60-99,000 (27%) or 199,000 (26%). 17% did not report their income, 16.3% were at 35-59,999; 9.7% under 35,000 and 4.6% over 200,000.

65% were women. 35% were men.

The following key findings reveal the attitudes and concerns of these Washtenaw, Livingston and Oakland County adults who took the survey between September 2011 and March 2012. A full methodology statement is found at the end of this report.

# Respondents are fairly positive about the quality of water in their local lakes, rivers and streams.

Forty-five percent (45%) thought water quality was improving (answering "somewhat better" or "much better"), more than double the result of the 2004 Regional Water Quality Survey (20% answered similarly). In general, based on HRWC monitoring data, that opinion is consistent with reality and public information provided by HRWC. Nineteen percent (19%) reported that they thought it was getting worse ("somewhat worse" or "much worse"), which was a reduction by almost half the result of the 2004 regional survey (where 36% reported it was getting worse).

# Respondents recognize that local upstream water quality definitely impacts the Great Lakes.

A resounding 94% agreed or strongly agreed that the quality of local streams where they live affects the Great Lakes (and Lake St. Clair). In 2004 only 76% agreed or strongly agreed.

### Stormwater runoff is a major concern.

Fifty-six percent (56%) recognize that stormwater runoff contributes the MOST pollution to our local lakes, rivers, and streams, as compared to other sources (wastewater treatment plant discharges, factories/industrial discharge, sewage overflows, agriculture, illegal dumping) with an even greater number, 73%, understanding that stormwater goes directly into lakes and streams without treatment after it enters a stormdrain or roadside ditch. National data and analysis in Huron River watershed management plans support that conclusion. EPA and states report that today, nonpoint source (NPS) pollution remains the Nation's largest source of water quality problems. In 2004 only 23% of SE Michigan survey respondents thought stormwater runoff was the greatest contributor.

### 4. Respondents understand the watershed concept.

As indicated by their recognition that upstream water quality impacts the Great Lakes (94%), their concern for polluted runoff (56%), and their recognition that runoff goes directly to waterways untreated (73%), respondents *generally understand the relationship between runoff, local streams, and the Great Lakes.* 

Fifty-two percent (52%) described the location where they live as being in a watershed with 26% reporting that they live near a watershed; 22% said they did not live in a watershed or that they didn't know, indicating that the word "watershed" is still not universally understood.

The good news for groups using "watershed" in outreach materials, like HRWC, is that the respondents of this survey have a higher level of understanding of the word overall as compared to the 2004 regional survey in which only 14% knew they lived in a watershed and the 2008 Community Attitude and Interest Survey from Oakland County where slightly more (18%) indicated they live in one.

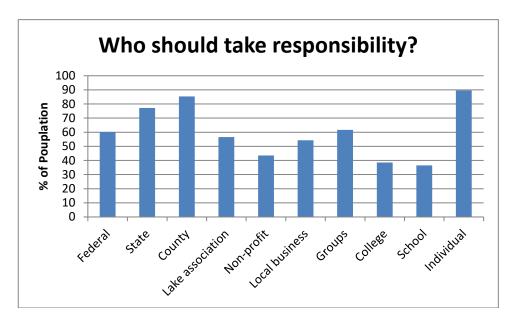
The responses to these questions are a sign that education on this concept by HRWC and partners has been successful, but there is still work to be done.

# Respondents believe that everyone is responsible for protecting and preserving water quality.

When asked their opinion about protecting and preserving the water quality of local lakes, rivers and streams respondents indicated that "each of us as individuals" should take responsibility (89%). But they also pointed to a number of others who need to be involved, including our federal, state and county or municipal governments and resource user groups such as boaters, canoeists, kayakers and fishermen.

In the past 2 years I have "cleaned storm drains and raked leaves out of the street" to protect water resources.

-Response to open-ended question.



# 6. There are some noticeable differences between respondents from Washtenaw County and those outside of it.

Washtenaw County residents appear to be well-focused on watershed issues. Their answers to questions related to actions that protect lakes and rivers, what they think contributes most to pollution, whether stormwater is treated after it enters a stormdrain, and things like whether and how often they fertilize their lawns all show a higher understanding of the connection between stormdrains and local water bodies as well as a belief that personal actions can help prevent polluted runoff.

These concepts have been the crux of the Middle Huron SAG's educational efforts for the past decade and with support from communities like the City of Ann Arbor and the Washtenaw County Water Resources Commissioners Office educational pieces such as the Watershed Community Calendar have been regularly and widely distributed in the urban and suburban areas of the Middle Huron.

But watershed residents outside of Washtenaw County interact with water resources more. Their responses show that they are doing more fishing, boating and swimming than their Washtenaw counterparts. They were less likely to think that water quality is getting better than respondents in Washtenaw and they were more likely to choose factories, sewage overflows, agriculture and illegal dumping over stormwater runoff as contributing the most pollution to water resources.

# 7. HRWC's education and outreach efforts are reaching those whose age and income reflect that they live in owner occupied homes (the target audience), but are missing others.

Eighty-seven percent (87%) of the people responding to the Watershed Community Survey were white (2010 Census - 74.5%). The Black/African American population made up only 1.5% of our respondents while they represent almost 13% of the total population in Washtenaw County.

Our survey also reached significantly more people in the 45-64 age range (60%) than is reflective of the overall population (30%) and fewer (10%) in the 26-34 age range than the overall population (17%).

# 8. There is a high degree of willingness to do what is needed to reduce pollution heading to our water bodies.

There were very few respondents who were NOT willing to change or engage in practices that protect our rivers lakes and streams. Examples include: changing how they wash their cars (94%), to promptly picking up and disposing of pet waste (89%), having a septic tank serviced every 3-5 years (98%), sweeping excess fertilizer and grass clippings from pavement onto lawns (96%) disposing of household hazardous waste at community collection days (97%), directing downspouts away from paved areas and into yards (96%), landscaping yards with native Michigan plants (98%) using low phosphorus or slow release nitrogen lawn fertilizer (98%), or changing lawn watering practices (95%)

Willingness drops a bit for actions that require more resources and planning such as installing a rain barrel or putting in a rain garden (slightly fewer —88%— indicated that they were willing to do either). While 65% reported that they don't use a rain barrel, 41% reported they were VERY willing to install one.

We didn't ask respondents if they already had a rain garden, instead opting for a few general gardening questions on soil testing, fertilizer and native plants. However, 89% reported using native plants sometimes (41%), frequently (33%) to always (15%).

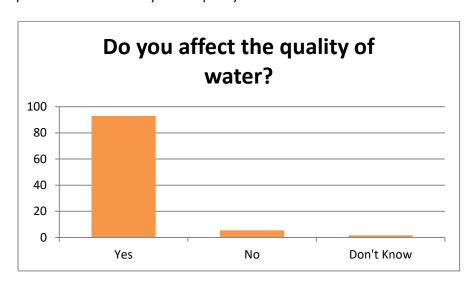
There is high public interest in using rain barrels, native plants and rain gardens as a means to protect water quality.

\*Interestingly 71% of respondents reported that they NEVER test their soil for nutrients. This result came in spite of community efforts over the past several years to promote soil testing. Up until 2012 Michigan State University Extension soil testing services were offered at participating retailers in Washtenaw, Livingston and Oakland counties with drop off sites and free consultation during the month of April.

### **ADDITIONAL STUDY FINDINGS**

### **Beliefs and Activities Inform Actions**

•Ninety-three percent (93%) of respondents assumed that the way they care for their lawn and home affects the quality of water in lakes, rivers, and streams in the community where they live, while only seven percent of respondents did not recognize the impact of their lawn-care and home maintenance practices to community water quality.



- Even though most respondents recognized that their care for the lawn and home affects the quality of water in the community, only seventy-two percent (72%) of the respondents have taken some action in their home, yard or community to protect water resources.
- •Seventy-three percent (73%) of respondents believed that stormwater (rain water) goes directly into lakes and streams without treatment after it enters a stormdrain or roadside ditch; about four percent (4%) of respondents believed that the stormwater goes to lakes and streams, but that it is treated; and five percent (5%) of respondents believed that the stormwater goes directly to the wastewater treatment plant after entering a storm drain or roadside ditch.

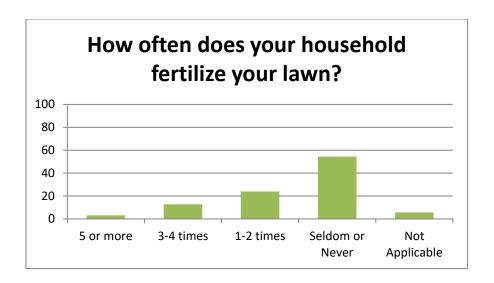
- Most of the respondents (75.1%) received their drinking water from a public water system or supply, while only about fifteen percent (15%) reported their water comes from individual wells and three percent (3%) reported they get their drinking water supply from bottled water. Others indicated that their water comes from municipal, community or neighborhood association wells.
- •When we asked the respondents about their experiences with lakes and streams in their community, the top-three activities were not in directly contact with water: hiking or walking near lakes and streams (80.1%), bird/nature watching (51.9%), biking (45.7%). The top-three activities that involved use of water were canoeing/kayaking (48.8%), swimming (41.9%), and boating (30.1%).
- •Most residents (81%) did not have a septic system at their home, while about two percent (2.1%) of the respondents did not know what a septic system was. 12.8% of the people who do own a septic system have checked the system during the past 3-5 years, while 2.8% of the people with a septic system did not know whether the system was checked or not.

### Disposal of Hazardous Materials, Pet Waste, Grass Clippings and Leaves

- •Most of the respondents (70.2%) dispose of home toxics and hazardous materials (e.g. old oil or fluids from vehicles, batteries, pesticides, and other household hazardous wastes) at community collection sites, while some dispose of them in their regular trash (6.1%), or through special curbside collection programs (9.1%) and containers (4.6%).
- •When respondents, who do not dispose of materials at community collection sites, were asked why they do not dispose them this way, answers were that (1) they did not know where they were located (54.4%), (2) they did not have time (21.1%), or (3) they did not have collection sites in their community (21.1%).
- •About eight out of ten people (84%) dispose of their dog's waste in their regular trash; and nobody disposed of the waste into the street or down stormdrains.
- •When respondents were asked how they dispose of grass clippings, the top-three answers were: leaving them on their lawn/mulching (72.8%), composting them in their yard (12.8%) and using curbside pickup (7.9%).
- •When respondents were asked about the disposal of fall leaves, the top-three answers were: curbside pickup (38.9%), leaving on the lawn/mulching (27.8%), composting them in their yard (24.4%).

### **Fertilizer Use**

•About half of respondents (54.4%) never fertilized their lawns; and those who reported they did fertilize mostly used phosphorous free (44.6%) and organic (39.9%) products.



In the past 2 years I have "paid better attention to what we feed our lawn. We're mulching much more" to protect water resources.

—Response to open-ended question.

- Respondents tended to choose fertilizer mostly based on whether it was safe for the environment (37.3%), their previous experience (22.5%), and the price (15.9%).
- None of the respondents used a lawn service for fertilizer and/or pesticide application.
- •When respondents were asked if they were willing to require a lawn service to use environmentally friendly/organic products and practices, more than half of the respondents (55.1%) would ask the service to use eco-friendly products.
- •When respondents were asked if they would sweep excess fertilizer and grass clippings from the pavement back onto the lawn to in order to protect water quality, almost all of them were willing (95.9%).

### **Commercial Facilities for Vehicle Maintenance and Car Washing**

- Most respondents typically washed their vehicles at a commercial car wash; however, there were still some people who washed their cars at home (12.8% washed their cars in their driveway and 4.8% on their grass).
- Almost all respondents (94%) were willing to change their car washing practices to help reduce pollution of streams and lakes in their community.
- Most respondents (84%) did not change their vehicle's motor oil, transmission fluid or radiator fluid at home, while about sixteen percent (15.7%) of the respondents regularly changed their vehicle's motor oil, transmission fluid or radiator fluid at home.
- •There were no questions specifically about willingness to dispose of motor oil, transmission fluid or radiator fluid using safe practices. Instead respondents willingness to dispose of "household hazardous"

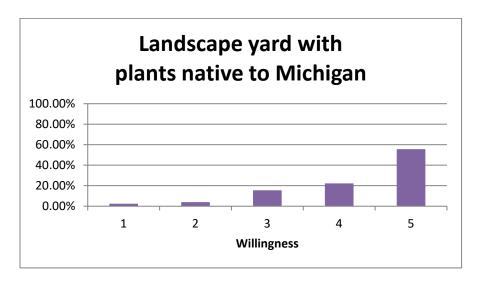
waste" at community collection sites (only 3.4% not willing) is a strong indication of their willingness to similarly dispose of vehicle fluids.

### Native Plants, Rain Gardens and Rain Barrels

In the past 2 years I have "added more native plants instead of grass to our landscaping" to protect water resources.

-Response to open-ended question.

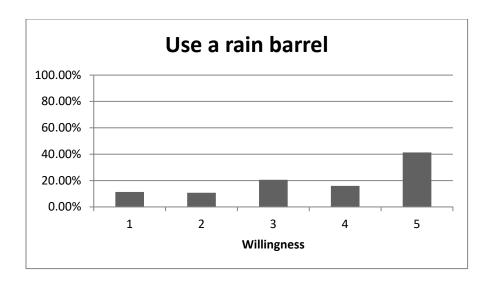
•When respondents were asked about their willingness to do things that reduce water pollution, many respondents already were or had a high willingness to implement changes to their landscaping practices. Almost 40% reported they were *already landscaping with plants native to Michigan* and of the 60% who weren't, 93.5% expressed some willingness to do so in the future (55.6% *very willing*).



In the past 2 years I have "installed a rain barrel" to protect water resources.

•Thirty-one percent (31.4%) reported they were already using rain barrels with 88.7% expressing some willingness to install one in the future (41.3% *very willing*).

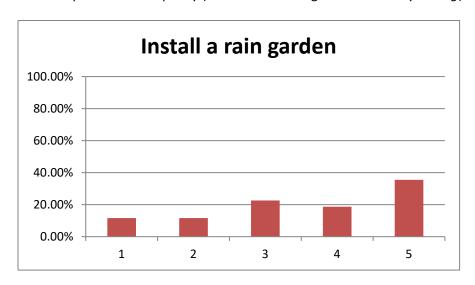
<sup>-</sup>Response to open-ended question.



In the past 2 years I have "planted a rain garden" to protect water resources.

—Response to open-ended question.

•Of the 86.2% respondents who don't already have a rain garden, only 11.6% were not willing to put one in to protect water quality (88.4% were willing with 35.5% *very willing*).



# **River Crossing and Watershed Entry Signs**

- More than half of respondents from Livingston (65.85%), Oakland (76.09%), Washtenaw (61.89%), and Other (61.54%) saw signs identifying rivers or river crossings.
- •Almost half of the respondents from Livingston (56.10%), Oakland (69.57%), Washtenaw (44.58%), and Other (56.41%) saw signs indicating entrance of a watershed.

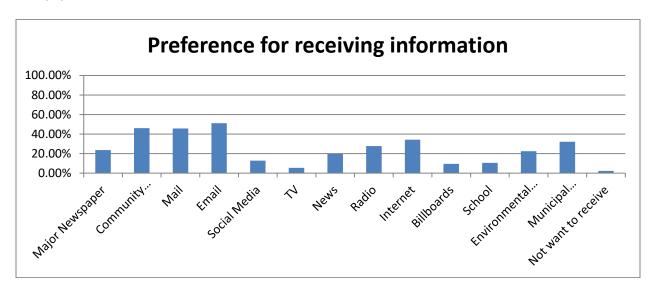
# In the past 2 years I have "signed up as a RiverSafe home" to protect water resources.

-Response to open-ended question.

- •When respondents were asked specifically if they had seen signs promoting either of the two public education programs run by the Washtenaw County Water Resources Commissioner, respondents from Livingston (0%), Oakland (2.17%), Washtenaw (36.54%) and Other (7.69%) rarely saw the signs for the RiverSafe Homes residential program; while respondents from Livingston (4.88%), Oakland (4.35%), Washtenaw (9.09%), and Other (15.38%) rarely saw the signs for the community partners for Clean Streams program targeting businesses and other commercial entities. It should be noted that the RiverSafe Homes and Community Partners for Clean Streams programs are limited to Washtenaw County.
- Few respondents from Livingston (19.51%), Oakland (13.04%), Washtenaw (19.06%), and Other (25.64%) have never seen any of the signs regarding identification of rivers or river crossings, entering a watershed, the RiverSafe Homes program, and the Community Partners for Clean Streams Program.

# They Want River Protection Information by Email and Mail, But they Still Rely on Community News

•When respondents were asked where they would most like to receive information about what they can do to protect lakes and streams, the top three choices were email (51.2%), community newspapers (46%) and mail (45.8%). The lowest ranked choices were social media (12.8%), schools (10.5%), billboards (9.6%) and TV (5.5%). In the middle were internet (34.2%), radio (27.8%), and major newspapers (23.6%).



•When respondents were asked what communications method alerted them to the survey 43.7% responded that they heard about it by email and 26.2% heard about it by mail (indicating their receipt of the Watershed Community Calendar). The rest reported that they learned about the survey at municipal offices, a festival or event, the library, their workplace or a retailer, from the newspaper, through social media, on a website, from a friend or in another way.

### **Web Survey Demographics and Bias**

The survey was administered exclusively through the internet, using an online survey. Participation was sought through a variety of distribution methods: 37,000 printed Watershed Community Calendars and print advertisements in local newspapers and community produced newsletters with a direct URL and a special call to action to participate in the survey; and emails, website and social media announcements with links to an announcement page and/or the survey instrument itself.

Generally, "older people (particularly those 65 and older), non-Whites, people with lower income, less educated people, and people living in rural areas have lower Internet access rates than their counterparts and are less likely to have high-speed connections. Therefore, they are more likely to be left out of Internet surveys, and people within these groups who have Internet access may differ considerably from those who do not." (Internet, Mail and Mixed-Mode Surveys, The Tailored Design Method, Don A. Dillman, Jolene D. Smyth and Leah Melani Christian, 2009).

In the Watershed Community Survey there is a higher response rate in older adults (age 45-54 and 55-64) and a lower response rate in younger adults (age <25 and 26-34). There is an underrepresentation of African American and Asian residents. There is less representation in the lower income (<\$35K) and higher income (\$100K-\$200K) categories. Some of these differences could be attributed to the primary distribution of the survey through the Watershed Community Calendar which targets tips and information toward home-owners and which is direct mailed by the City of Ann Arbor to approximately 19,000 single family homes. Some can be attributed to the web-based nature of the survey.

Social desirability bias is the tendency of respondents to answer questions in a manner that will be viewed favorably by others. Research shows that social desirability bias is less likely to occur in a self-reporting survey conducted anonymously on line than in an interview setting (*Internet, Mail and Mixed-Mode Surveys, The Tailored Design Method*, Don A. Dillman, Jolene D. Smyth and Leah Melani Christian, 2009).

### ABOUT THE SURVEY AND HOW THE RESEARCH WAS CONDUCTED

**Project Description:** The Watershed Community Survey was designed to measure public awareness of, attitudes toward, behaviors and constraints related to local water bodies and stormwater pollution. The study area included Washtenaw and Livingston Counties and was targeted toward residents of the Huron River watershed who were exposed to nonpoint source pollution prevention and watershed education messaging through the materials and regular outreach channels of HRWC and the participating communities.

The survey was also designed so that results could be compared to a 2004 Southeast Michigan Council of Governments (SEMCOG) Regional Water Quality Survey that was a random sampling of the population of a seven county area that included Washtenaw and Livingston Counties and a 2008 Community Attitudes and Interest Survey which was conducted solely within Oakland County by the Oakland County Drain Commissioner's Office.

**Purpose:** To evaluate effectiveness of past community information and education efforts in general and use results to inform future activities.

**Question-Answer Profile:** Questions were comparable to those of the 2004 SEMCOG Regional Water Quality Survey (with some differences) and were designed to determine public awareness or misconceptions about:

- Connections between storm water and pollution
- Connections between, storm drains, local streams and water quality in Great Lakes
- Awareness of roadside and other community signage
- Household practices including car washing, septic system maintenance, auto maintenance, home toxics disposal, pet waste, lawn care and fertilizer use
- Willingness to help reduce pollution through small actions at home
- Preferred information delivery method on water quality topics
- Member of household engaging in pollution prevention activities
- Outreach method prompting them to participate in the survey
- Basic household demographic information, ethnicity, income, age
- Whether they would like to provide their email address for further communication from HRWC

**Survey Method:** The goal was to achieve a representative sampling of residents who receive the 2012 Watershed Community Calendar by direct mail, from municipal offices, at public libraries, select workplaces, at community festivals or events, or directly from the Huron River Watershed Council.

Approximately 37,000 Calendars were distributed in September through December of 2012. Each calendar was wrapped in a paper cover that contained information about the survey and a call to action to participate by going to a designated URL, <a href="www.hrwc.org/survey">www.hrwc.org/survey</a> and answering 10 minutes of questions in exchange for a chance to win prizes.

Additional responses were sought by email, a print advertisement in the Ann Arbor Observer, community-produced newsletters and web announcements as per the general outreach practices of HRWC and participating communities.

The survey was administered using an online survey tool called Survey Monkey.

HRWC and the following communities distributed calendars to residents (approximately 31,000 to residents in Washtenaw, 6,000 to residents in Livingston).

**Washtenaw County:** City of Ann Arbor, City of Ypsilanti, Pittsfield Township, Village of Dexter, Washtenaw County Road Commission, Washtenaw County Water Resources Commission, Ypsilanti Township, Eastern Michigan University, Barton Hills Village

**Livingston County:** Brighton Township, City of Brighton, Livingston County Drain Commission, Livingston County Road Commission, Village of Pinckney, City of Howell, Green Oak Township, Hamburg Township, Marion Township, Putnam Township

**Data Collection:** The survey was offered online through Survey Monkey. It opened at the release date of the 2012 Watershed Community Calendar (September 2011) and remained open until an appropriate sample size for Washtenaw County was obtained (March 2012). Responses were confidential and anonymous. Upon completion of the survey, participants were hyperlinked to an online form where they could provide contact information if they wished to participate in the drawing for prizes or receive future emails on water-related issues from HRWC.

Goals for sample size were based upon the following:

Washtenaw County: Population by SEMCOG Community Profile 2010: 347,699; Population by Census Bureau, 2009: 347,563; Sample size calculator: Confidence level: 95%, Confidence interval: 5%, Sample size: 384

Livingston County: Population by SEMCOG Community Profile 2010: 183,420: Population by Census Bureau, 2009: 183,118 Sample size calculator: Confidence level: 95%, Confidence interval: 5%, Sample size: 383

Sample size results: 742 Total Responses

Washtenaw County – 572; Livingston County – 41; Oakland County – 46; and the rest reported their zip code as being outside of watershed boundaries.

**Quality Control, Data Management, Analysis and Reporting:** Review and consultation on the survey methodology and questions were provided by Cheryl J. Wiese, SSL Manager, Institute for Social Research, University of Michigan, through a non-profit consulting program offered by the Institute's Survey Research Center.

Survey data analysis and evaluation were conducted by Jane Park, a University of Michigan Masters student in Survey Methodology, under the guidance and supervision of University of Michigan Professor James Lepkowski. Dr. Lepkowski is a survey methodologist at the Institute for Social Research where he directs the Michigan Program in Survey Methodology. He has been on the faculty of Biostatistics and the Institute for Social Research since 1982, conducting research on survey sampling and estimation topics as well as teaching courses on surveys and related topics. He is also a member of the faculty at the Joint Program in Survey Methodology at the University of Maryland, a federally funded degree program created in the early 1990s to train present and future generations of survey methodologists in the federal statistical system.

Data were reviewed and assessed for significance by Jane Park and Dr. Lepkowski along with HRWC staff. Results are presented to participating partners in this written report.

# APPENDICES (available at www.hrwc.org/survey)

A: Survey Questions

B: 2012 Watershed Community Calendar

C: Call to Action to Participate on Calendar Cover

D: 2012 Watershed Community Calendar Distribution Report

E: Total Distribution Graphs

F: Washtenaw Distribution Graphs

G: Livingston Distribution Graphs

H: Answers to Open Ended Questions (Q3, Q30, Q32)

I: Respondent Zip Codes

### **About the Huron River Watershed Council**

Since 1965 the Huron River Watershed Council (HRWC) has been protecting the river and its tributary streams, lakes, wetlands and groundwater. HRWC coordinates programs and volunteer efforts that include pollution prevention, hands-on river monitoring, wetland and floodplain protection, public outreach and education, and natural resources planning.

HRWC is the only environmental organization dedicated solely to the health of the Huron River. Individuals, local businesses, and 40 communities support our work through voluntary membership.

To learn about HRWC programs, volunteer opportunities, or what you can do to support our work, go to HRWC's website at <a href="www.hrwc.org">www.hrwc.org</a> or call any member of HRWC's professional staff at 734-769-5123.



1. [	Oo you think the quality of water in lakes, rivers, and streams in the community where
yοι	ı live is:
0	Getting much worse
0	Getting somewhat worse
0	The same
0	Getting somewhat better
0	Getting much better
0	Don't know
2. [	Oo you think the way you care for your lawn and home affects the quality of water in
lak	es, rivers, and streams in the community where you live?
0	Yes
0	No
0	Don't know
3. I	n the past 2 years, have you or someone in your household taken action in your home,
yar	d or community to protect our water resources?
0	Yes
0	No
0	Don't know
If YE	ES: what actions have you or someone in your household taken?
4. V	Which ONE of the following do you think contributes the MOST pollution to lakes, rivers
and	streams in the community where you live?
0	Wastewater treatment plant discharge
0	Factories/industrial discharge
0	Stormwater (rain water) runoff into storm drains and roadside ditches
0	Sewage overflows
0	Agriculture
0	Illegal dumping

	Please indicate your level of agreement with the following statement: "The quality of all streams where I live affects the Great Lakes and Lake St. Clair."
0	Strongly agree
0	Agree
0	Neither
0	Disagree
0	Strongly disagree
0	Don't know
6. V	Where does stormwater (rain water) go after it enters a storm drain or roadside ditch in
yοι	ır community?
0	Directly into lakes & streams without treatment
0	To lakes & streams after treatment
0	To a wastewater treatment plant
0	Don't know
7. V	Which ONE of the following BEST describes the location where you live?
0	Near a watershed
0	In a watershed
0	Don't live in a watershed
0	Don't know/not familiar

qua	n your opinion, who should take responsibility for protecting and preserving the water ality of lakes, rivers, and streams in the community where you live? Multiple responses allowed.
	Federal government
	State government
	County/municipal/township government
	Lake or neighborhood association
	Non-profit organizations
	Local businesses
	Resource user groups such as boaters, canoe, kayakers, fishermen, etc.
	Local college or university
	Area schools
	Each of us as individuals
	Each of us as individuals
9. V	Where does your household receive its drinking water supply from?
0	Individual well
0	Municipal well
0	Community or neighborhood association well
0	Public water system or supply
0	Purchase bottled water
0	Don't know

	Which activities have you or other members of your household participated in or near estands are allowed.
	Fishing
	Boating
	Canoeing/kayaking
	Bird/nature watching
	Picnicking
	Biking
	Swimming
	Hiking/walking
	Other
	Don't participate in activities near lakes/rivers/streams
11.	Which of the following signs have you seen in your community?
	Signs identifying rivers or river crossings
	Signs indicating entering a watershed
	Signs for the RiverSafe Homes program
	Signs for the Community Partners for Clean Streams program
	None of these signs in my community
12.	Where do you or members of your household typically wash your vehicles during the
sur	mmer?
0	Home in the driveway
0	Home in the grass
0	Carwash
0	Other
0	Don't wash a vehicle
13.	Do you have a septic system at your home?
0	Yes
0	No
0	Don't know

14.	. Have you had your septic system checked or serviced during the past 3-5 years?
0	Yes
0	No
0	Don't know
0	Don't have a septic system
	. Do you or other members of your household usually change motor oil, transmission id, or radiator fluid for a vehicle at your home?
0	Yes
0	No
0	Don't know
	. Where does your household typically dispose of materials, such as old oil or fluids m your vehicle, batteries, pesticides, and other household hazardous wastes?
0	On the ground
0	With my regular trash
0	Special curbside collection program
0	Community collection site
0	Keep in a container at home
0	Down a storm drain/ditch
0	Other
0	Don't know
	. Why doesn't your household typically dispose of household hazardous waste at a mmunity collection site?
0	Don't know where one is located
0	Don't have time
0	No sites near my home
0	I don't think household hazardous waste facilities are necessary
Oth	er (please specify)

	Do you or other members of your household typically pick up your dog's waste when go for a walk?
_	Yes
	No
	Do not have a dog
	Do you or other members of your household typically pick up your dog's waste from
	ır yard?
	Yes
0	No .
0	Do not have a dog
20.	How does your household typically dispose of your dog's waste?
0	Throw in ditch
0	Dispose with regular trash
0	Bury in ground
0	Put in street or down storm drain
0	Do not pick up dog waste
0	Other
0	Do not have a dog
21.	What does your household typically do with your grass clippings?
0	Leave on the lawn/mulch
0	Compost them in yard
0	Put in roadside ditch
0	Curbside pickup
0	Other
0	Do not have yard

# **Watershed Community Survey** 22. What does your household typically do with your fall leaves? C Leave on the lawn/mulch Compost them in yard Put in roadside ditch Curbside pickup Other O Do not have yard 23. Which of the following BEST describes how often your household fertilizes your lawn? 5 or more times per year C 3-4 times per year 1-2 times per year Seldom or never O Not applicable -- no lawn 24. Which of the following types of fertilizer does your household use? C Phosphorus free C Slow release nitrogen C "Earth friendly" or organic Weed and feed Seasonal variety Other O Don't know Question does not apply to me

25.	Which of the following reasons influence the type of fertilizer or pesticide your							
hou	sehold uses most? Please check all that apply.							
	Previous experience with product							
	Price							
	Commercials/product displays							
	Recommendations from friends							
	Articles from newspapers/magazines							
	Store employees							
	How safe it is for the environment							
	State law or local ordinance							
	Other							
	Don't know							
	Question does not apply to me							
26.	26. Does your household use a lawn service for fertilizer and/or pesticide applications?							
0	Yes							
0	No							
0	Question does not apply to me.							
27.	Does your household ask your lawn service to use environmentally friendly/organic							
pro	ducts and practices?							
0	Yes environmentally friendly products and practices are used on my lawn							
0	Yes-I asked, but they don't offer them							
0	No-haven't asked, but will in future							
0	No-don't think using environmentally friendly products matters							
0	Don't know							
0	Question does not apply to me.							

# 28. Several ways that residents can help reduce pollution of streams and lakes in their community are listed below. Using a 5-point scale where "1" means not willing and "5" means very willing, please indicate how willing you would be to do each of the following.

	1	2	3	4	5	I already do this	Not applicable to me
Changing car wash practices	0	0	0	0	0	0	0
Promptly picking up and disposing of pet waste	O	0	0	0	0	0	O
Having septic tank serviced every 3-5 years	О	O	0	О	0	0	0
Sweeping excess fertilizer and grass clippings from pavement onto lawn	O	0	0	0	0	O	O
Disposing of household hazardous waste at a community collection day	0	0	O	0	O	0	•
Landscaping yard with plants native to Michigan	0	0	0	0	0	O	O
Using low phosphorus or slow release nitrogen fertilizer on lawn	0	0	0	0	0	0	0
Changing your lawn watering practices	O	0	0	O	0	0	O
Installing a rain barrel	0	0	0	0	0	0	0
Putting in a rain garden	$\circ$	0	$\circ$	0	0	0	0
Directing your downspouts away from paved areas and into your yard	O	О	О	О	O	0	•

# 29. How often do you participate in these activities?

	Never	Sometimes	Frequently	Always
Picking up litter	0	O	O	O
Fertilizing your lawn or garden	O	O	O	O
Using low or no phosphorus fertilizers	O	0	O	0
Recycling	O	0	0	0
Testing your soil for nutrients	O	0	O	O
Using native plants in your landscaping	O	O	O	O
Using a rain barrel	O	0	0	O
Disposing of hazardous materials at a collection site	O	O	0	O

30. Where would you prefer to receive information about what you can do to protect our									
lakes and streams	? Multiple resp	onses are allo	wed.						
☐ Major newspaper									
Community newspaper									
Newsletter or information	on mailed to home								
E-mail									
Facebook, Twitter or oth	ner social media								
☐ Government access TV									
☐ Television news									
Radio									
☐ Internet									
Billboards									
☐ Materials from school									
☐ Materials from environm	nental groups								
☐ Materials from municipa	al government								
☐ Don't want to receive in	formation								
Other (please specify)									
" 1 37									
		<b>v</b>							
31. Which person in	n your househ	old MOST frequ	ently does the	activities liste	ed below?				
	Adult male	Adult female	Child 12-17	Child under 12	Not applicable/nobody				
Picks up after your dog									
Washes the car									
Fertilizes the lawn									
Landscaping/gardening									
Mows the lawn									
Vehicle maintenance									
Disposes of household hazardous waste									
32. Are there any environmental concerns that you have that you feel are very important?									
Just a reminder that you	ır responses will re	main COMPLETEL	Y CONFIDENTIAL.						

33.	What is your ZIP code?		
34.	Which of the following best describes your ra	ce/ethnicity (check all that ap	ply)?
	Asian/Pacific Islander		
	Black/African American		
	White		
	American Indian/Eskimo		
	Other		
35.	What is your age?		
0	Under 25		
0	26-34		
0	35-44		
0	45-54		
0	55-64		
0	65+		
36.	Would you say your annual household incor	ne is:	
0	Under \$35,000		
0	\$35,000-\$59,999		
0	\$60,000-\$99,999		
0	\$100,000-\$199,999		
0	More than \$200,000		
0	No response		
37.	Your gender:		
0	Female		
0	Male		

# Watershed Community Survey 38. How did you hear about this survey? C Calendar mailed to home Calendar from municipal offices Calendar from a festival or event C Calendar from a library, workplace, or retailer Newspaper advertisement Post card C E-mail Social media site like Facebook or Twitter Website Friend Other



streams in our community. Complete the survey for a chance to win one of ten \$25 gift cards or a Flip video camera. Turn to the back cover to learn more or go to...

# www.hrwc.org/survey

available for everyone. need and how we can best provide it as we strive to keep our fresh water ecosystems backyard. Your input will help us determine what information you and your neighbors and how you may be protecting our lakes, rivers, and streams right from your own clean and vibrant, rich with thriving populations of plants and animals with clean water Community Calendar want to learn what you think about the quality of our local water The Huron River Watershed Council and the communities that sponsor the Watershed

Please take our online Watershed Community Survey by going to www.hrwc.org/survey

urban communities, people who paddle the Huron for recreation and those who may or private wells for clean water, people who live in rural areas and those in our larger drinking water from the Huron River as well as those who rely upon underground aquifers being distributed with the 2012 Calendar to approximately 40,000 residents of all kinds have never even seen it. in Washtenaw and Livingston Counties. Participants include those of you who get your Your participation is very important. To keep it as cost-effective as possible, the survey is

for one of ten \$25 gift cards or a Flip video camera. a token of our appreciation, when you complete the survey you can enter our drawing The anonymous survey includes 10 minutes of easy questions. As added incentive and

for your participation the past several years and inform our future decisions on programs like the Watershed Every opinion provided, including yours, will help us evaluate our outreach efforts for Community Calendar. We hope you will help us out and want to thank you in advance



(734) 769-5123 × 602. If you have questions please contact Pam Labadie at HRWC, plabadie@hrwc.org or

to win one of ten \$25 gift cards or a Flip video camera. streams in our community. Complete the survey for a chance **Take our online survey** to help protect the lakes, rivers, and

www.hrwc.org/survey

### 2012 Huron River Watershed Community Calendar Distribution

- 37,000 calendars were distributed in total
- 13 communities/local entities participated and distributed 34,000 either through direct mail or otherwise. Per piece cost of calendar approximately \$.90. Additional costs \$.195 per piece bulk rate postage and \$35 per 1,000 in mailing prep services for communities that direct mailed to residents.

City of Brighton

**Livingston County Drain Commission** 

**Livingston County Road Commission** 

Village of Pinckney

**Brighton Township** 

City of Ann Arbor

Ann Arbor Public Schools

Village of Dexter

Washtenaw County Water Resources Commissioner

Pittsfield Township

City of Ypsilanti

Charter Township of Ypsilanti

Eastern Michigan University

Washtenaw County Road Commission

Barton Hills Village

Marion Township

- Publicized as available for free to the public in HRWC's quarterly newsletter going to approximately 3,000 individual, business and government members and on HRWC's website and distributed at key HRWC meetings and events.
- HRWC provided calendars to over 80 entities for their employees and for the public (thanks to volunteers from City of Ann Arbor Natural Areas Preservation) (see below and page 2).

Ann Arbor Community Cntr Mack Pool

Ann Arbor Hans-On Museum Main Branch AADL
Arbor Farms Michigan League
Argo Livery Michigan Union
Arrowood Coop Mr. Stadium

B-24's (NEW) Coffee Shop Natural History Museum

Bank of Ann Arbor\*

Big City Small World Café

NEW Center

Bivouac

Nicola's Books

**Bryant Community Center** 

**Buhr Park** 

Carrillon Chocolate
CC Little (Geology) Bldg

Chemistry Bldg

Cnty Frm Prk, Murry Rec

Concordia College

Crazy Wisdom Bookstore Dawn Treader Book Shop Downtown Home & Garden

**Ecology Center** 

EH Kraus (Nat Sci) Bldg Elevators, City Hall

EMU Biology Dept.

EMU Geology Dept

EMU Student Center Espresso Royale Farmer's Market

Food Co-op

Friends Meeting House

Fuller Park Gallup Park

Hatcher Grad Library Huron Hills Golf Course Islamic Center of AA Jewish Community Center

Jolly Pumpkin Kerrytown Shops\*

KeyBank\*

Legacy Land Conservancy

Leslie Park Golf Course
Livingston Land Conservancy

Lobby, City Hall

MacFarland Tree Service

Northwood Community Cntr Peace Neighborhood Center

People's Food Coop Pierpont Commons

REI

Reinhart Realtors\*

Shapiro Undergrad Library

Smoothie King SNRE (Dana) Bldg Starbucks Coffee Sweetwaters Café Sweetwaters Café The Corner Brewery

The Ugly Mug Coffee Shop

Thomson Reuters\*

Tommy Thomson Florist
Toyota Technical Center\*

**Turner Senior Resource Center** 

U of M Career Center UM Art & Arch Bldg UM Botanical Gardens

UM Program in Environment
Undrgrad Resrch Op Prog.
Vets Park Pool and Rink
Wash Comm College
Washtenaw Alano Club
Wheeler Service Center

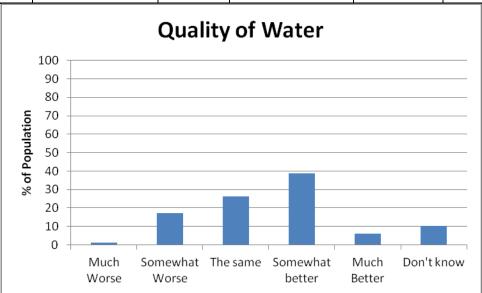
Whole Foods Whole Foods

YMCA

Ypsilanti District Library Ypsilanti District Library Zen Buddhist Temple Zingerman's Next Door

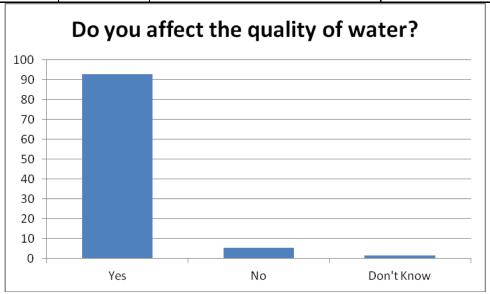
Q1: Do you think the quality of water in lakes, rivers, and streams in the community where you live is:

	Much Worse	Somewhat Worse	The same	Somewhat better	Much Better	Don't know	Total
N	10	128	195	287	45	76	741
%	1.3	17.3	26.3	38.7	6.1	10.3	100



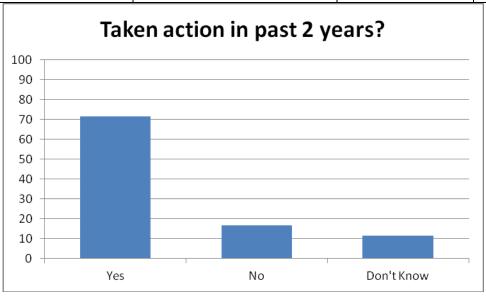
Q2: Do you think the way you care for your lawn and home affects the quality of water in lakes, rivers, and streams in the community where you live?

	Yes	No	Don't Know	Total
N	685	40	12	737
%	92.9	5.4	1.6	100



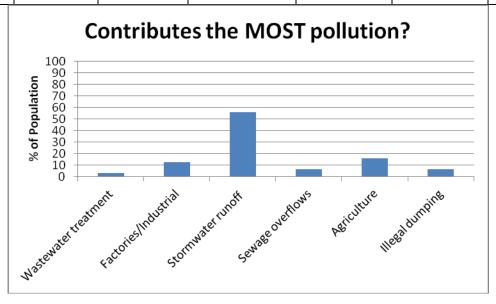
Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

	Yes	No	Don't Know	Total
N	526	124	86	736
%	71.5	16.8	11.7	100



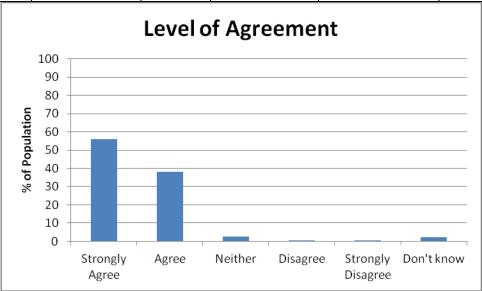
Q4: Which ONE of the following do you think contributes the MOST pollution to lakes, rivers, and streams in the community where you live?

	Wastewater treatment	Factories/ Industrial	Stormwater runoff	Sewage overflows	Agriculture	Illegal dumping	Total
Ν	21	93	408	47	116	48	733
%	2.9	12.7	55.7	6.4	15.8	6.5	100



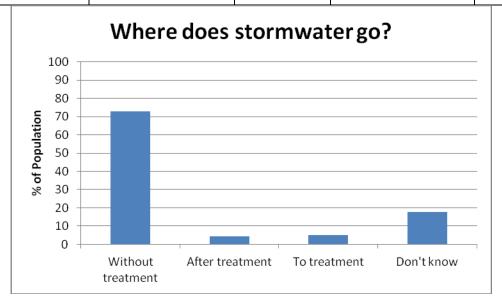
Q5: Please indicate your level of agreement with the following statement: "The quality of local streams where I live affects the Great Lakes and Lake St. Clair."

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	Don't know	Total
N	413	281	19	4	3	17	737
%	56	38.1	2.6	0.5	0.4	2.3	100



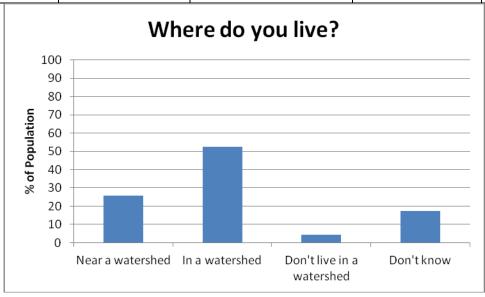
Q6: Where does storm water (rain water) go after it enters a storm drain or roadside ditch in your community?

	Without treatment	After treatment	To treatment	Don't know	Total
N	531	31	36	129	727
%	73	4.3	5	17.7	100



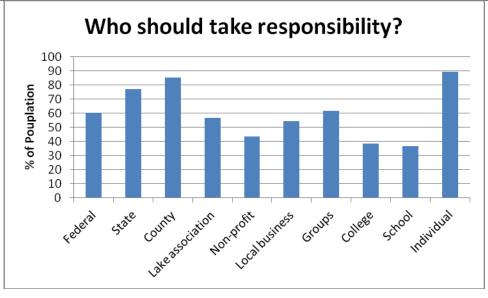
Q7: Which ONE of the following BEST describes the location where you live?

	Near a watershed	In a watershed	Don't live in a watershed	Don't know	Total
N	187	382	33	126	728
%	25.7	52.5	4.5	17.3	100



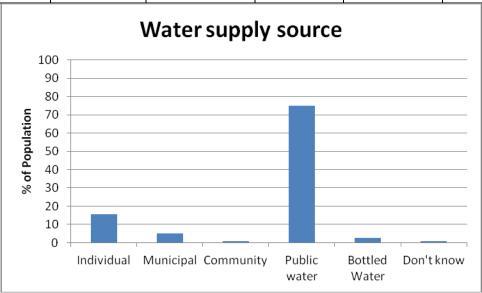
Q8: In your opinion, who should take responsibility for protecting and preserving the water quality of lakes, rivers, and streams in the community where you live?

	Federal	State	County	Lake association	Non-profit	Local business	Groups	College	Schools	Individual
N	447	573	633	420	323	403	458	286	271	664
%	60.2	77.2	85.3	56.6	43.5	54.3	61.7	38.5	36.5	89.5



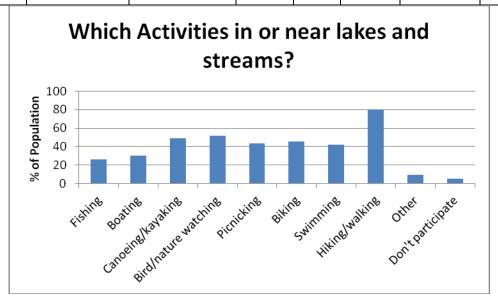
Q9: Where does your household receive its drinking water supply from?

	Individual	Municipal	Community	Public water	Bottled Water	Don't know	Total
N	114	37	5	547	19	6	728
%	15.7	5.1	0.7	75.1	2.5	0.8	100



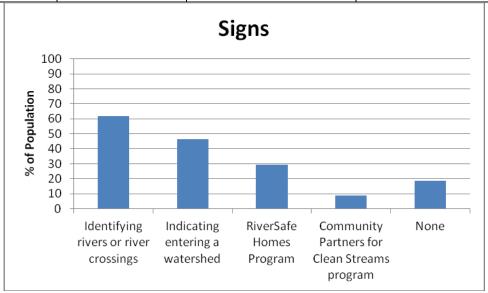
Q10: Which activities have you or other members of your household participated in or near lakes and streams in this area during the past year?

	Fishing	Boating	Canoeing/kayaking	Bird/nature watching	Picnicking	Biking	Swimming	Hiking/walking	Other	Don't participate
N	193	223	362	385	323	339	311	594	71	37
%	26	30.1	48.8	51.9	43.5	45.7	41.9	80.1	9.6	5



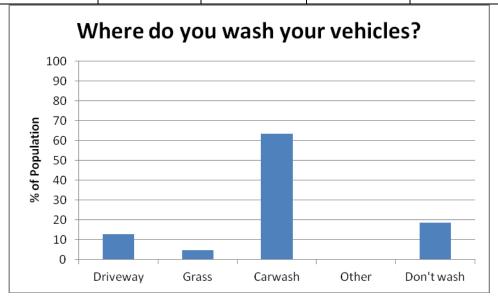
Q11: Which of the following signs have you seen in your community?

	Rivers or river crossings	A watershed	RiverSafe Homes Program	Community Partners for Clean Streams program	None
N	460	346	217	65	137
%	62	46.6	29.2	8.8	18.5



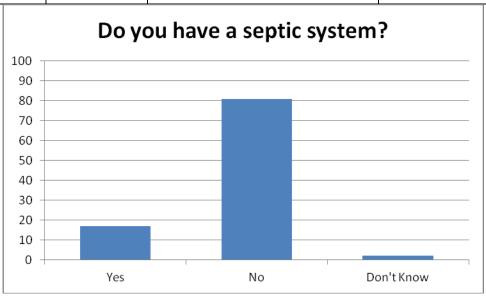
Q12: Where do you or members of your household typically wash your vehicles during the summer?

	Driveway	Grass	Carwash	Other	Don't wash	Total
N	93	35	461	3	136	728
%	12.8	4.8	63.3	0.4	18.7	100



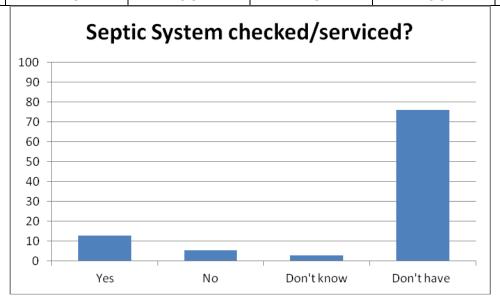
Q13: Do you have a septic system at your home?

	Yes	No	Don't Know	Total
N	123	587	15	725
%	17	81	2.1	100



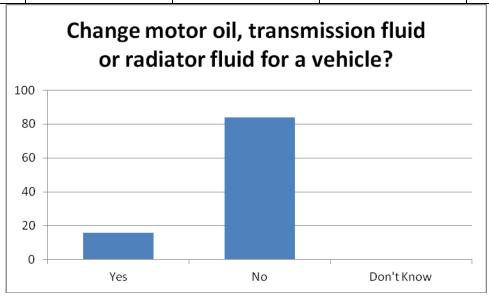
Q14: Have you had your septic system checked or serviced during the past 3-5 years?

	Yes	No	Don't know	Don't have	Total
N	95	41	21	563	720
%	12.8	5.5	2.8	75.9	100



Q15: Do you or other members of your household usually change motor oil, transmission fluid or radiator fluid for a vehicle at your home?

	Yes	No	Don't Know	Total
N	114	609	2	725
%	15.7	84	0.3	100



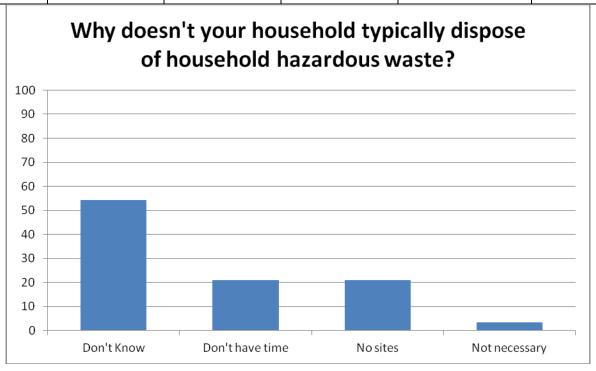
Q16: Where does your household typically dispose of materials, such as old oil or fluids from your vehicle, batteries pesticides and other household hazardous wastes?

	Grou nd	Regular trash	Special curbside collection program	Community collection site	Container	Strom drain/ditch	Other	Don't Know	Total
Ν	0	44	66	508	33	1	51	21	724
%	0	6.1	9.1	70.2	4.6	0.1	7	2.9	100



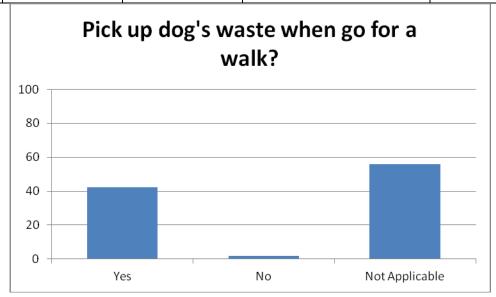
Q17: Why doesn't your household typically dispose of household hazardous waste at a community collection site?

	Don't Know	Don't have time	No sites	Not necessary	Total
N	93	36	36	6	171
%	54.4	21.1	21.1	3.5	100



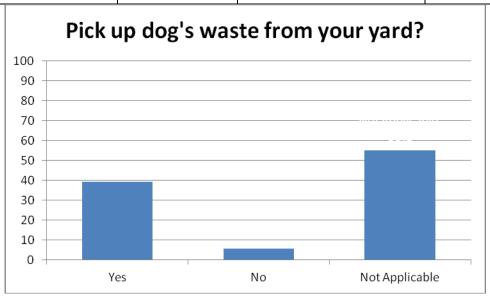
Q18: Do you or other members of your household typically pick up your dog's waste when you go for a walk?

	Yes	No	Not Applicable	Total
N	305	13 402		720
%	42.4	1.8	55.8	100



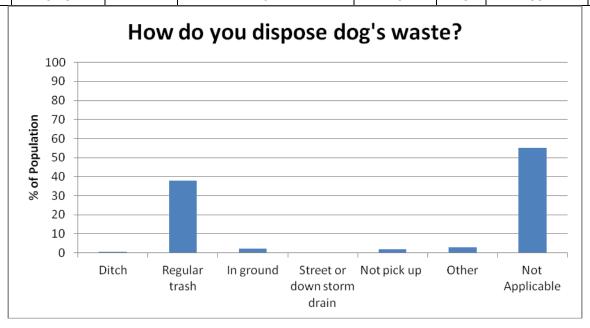
Q19: Do you or other members of your household typically pick up your dog's waste from your yard?

	Yes	No	Not Applicable	Total
N	282	41	397	720
%	39.2	5.7	55.1	100



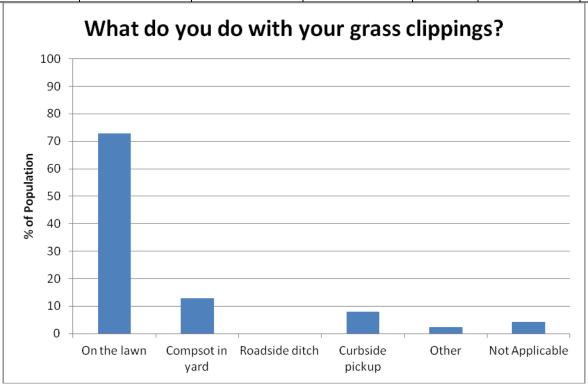
Q20: How does your household typically dispose of your dog's waste?

	Ditch	Regular trash	In ground	Street or down storm drain	Not pick up	Other	Not Applicable	Total
N	2	272	15	0	14	21	396	720
%	0.3	37.8	2.1	0	1.9	2.9	55	100



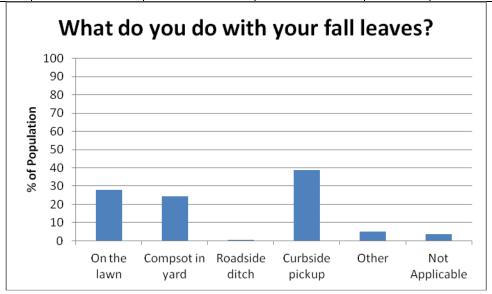
Q21: What does your household typically do with your grass clippings?

	On the lawn	Compsot in yard	Roadside ditch	Curbside pickup	Other	Not Applicable	Total
N	524	92	0	57	17	30	720
%	72.8	12.8	0	7.9	2.4	4.2	100



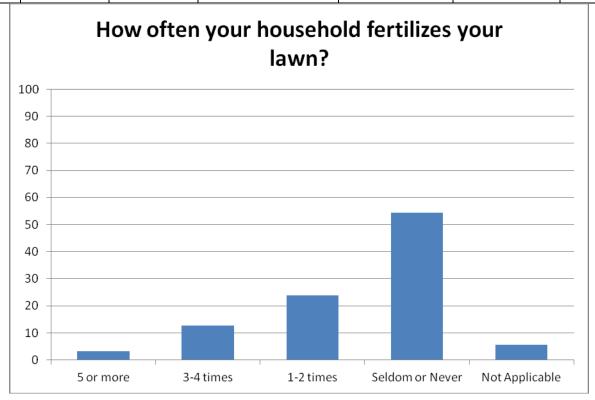
Q22: What does your household typically do with your fall leaves?

	On the lawn	Compsot in yard	Roadside ditch	Curbside pickup	Other	Not Applicable	Total
N	200	176	2	280	37	25	720
%	27.8	24.4	0.3	38.9	5.1	3.5	100



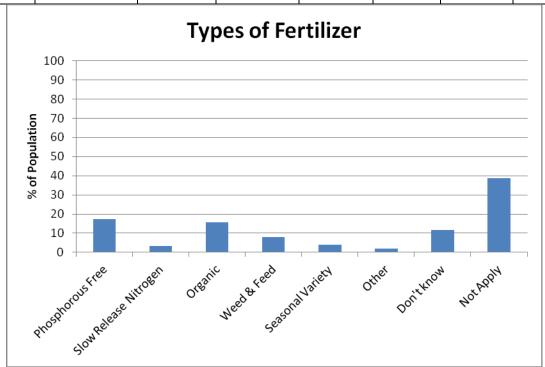
Q23: Which of the following BEST describes how often your household fertilizes your lawn?

	5 or more	3-4 times	1-2 times	Seldom or Never	Not Applicable	Total
N	23	92	172	391	41	719
%	3.2	12.8	23.9	54.4	5.7	100



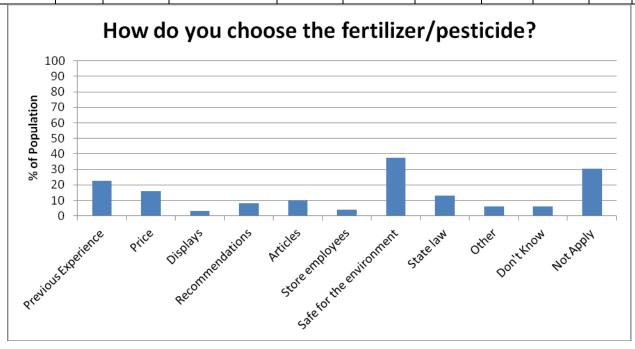
Q24: Which of the following types of fertilizer does your household use?

	Phosphorous Free	Slow Release Nitrogen	Organic	Weed & Feed	Seasonal Variety	Other	Don't know	Not Apply	Total
N	124	23	111	57	27	14	83	278	717
%	17.3	3.2	15.5	7.9	3.8	2	11.6	38.8	100



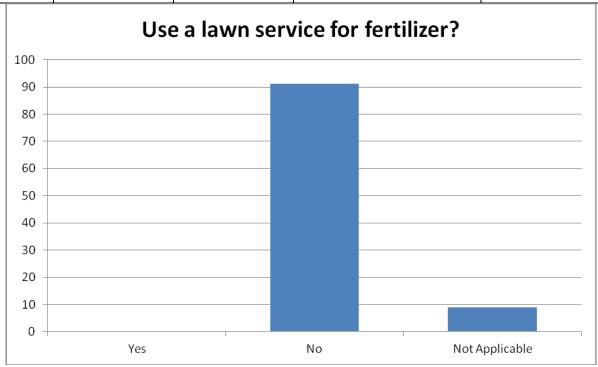
Q25: Which of the following reasons influence the type of fertilizer or pesticide your household uses most?

	Previous Experience	Price	Displays	Recommendations	Articles	Store employees	Safe for the environm ent	State law	Other	Don't Know	Not Apply
Ν	167	118	22	60	71	31	277	97	46	46	225
%	22.5	15.9	3	8.1	9.6	4.2	37.3	13.1	6.2	6.2	30.3



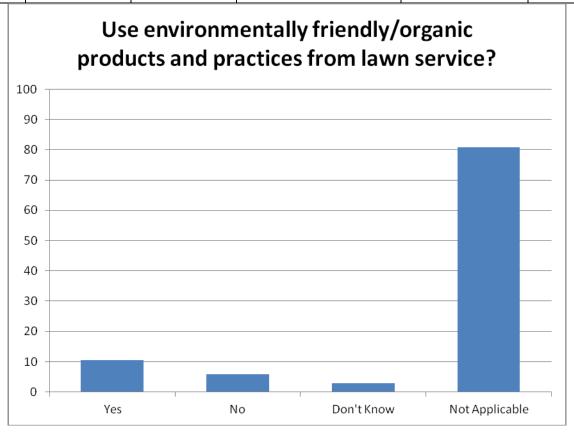
Q26: Does your household use a lawn service for fertilizer and/or pesticide applications?

	Yes	No	Not Applicable	Total
N	0	652	64	716
%	0	91.1	8.9	100



Q27: Does your household ask your lawn service to use environmentally friendly/organic products and practices?

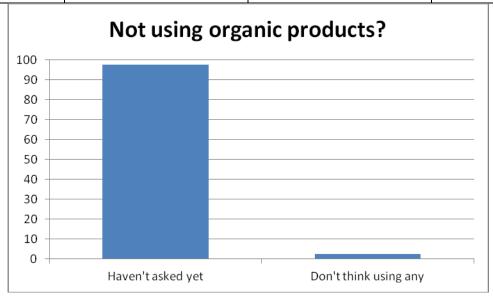
	Yes	No	Don't Know	Not Applicable	Total
N	76	42	20	580	718
%	10.5	5.8	2.8	80.8	100



	Environmentally friendly products	Don't offer	Total
N	75	1	76
%	98.7	1.3	100



	Haven't asked yet	Don't think using any	Total
N	41	1	42
%	97.6	2.4	100



Q28: Several ways that residents can help reduce pollution of streams and lakes in their community.

### **Changing car wash practices**

	Not Applicable	Applicable	Total
%	11.10%	88.90%	100%
n	78	626	704

	Already Do this	Not do this	Total
%	57.20%	42.80%	100%
n	358	268	626

	1 (Not Willing)	2	3	4	5 (Very willing)	Total
%	6.00%	5.00%	16.00%	22.00%	51.00%	100%
n	17	13	43	58	137	268

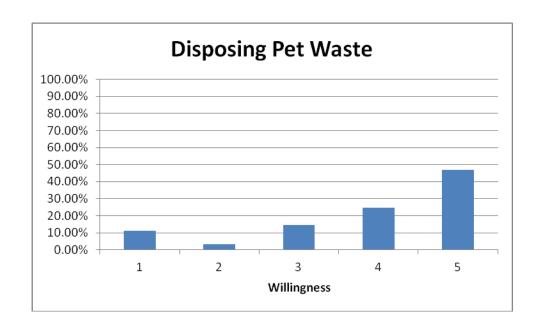


# Promptly picking up and disposing of pet waste

	Not Applicable	Applicable	Total
%	53.00%	47.00%	100%
n	376	333	709

	Already Do this	Not do this	Total
%	73.30%	26.70%	100%
n	244	89	333

		1 (Not Willing)	2	3	4	5 (Very willing)	Total
9	%	11.20%	3.40%	14.60%	24.70%	46.70%	100%
ı	n	10	3	13	22	41	89

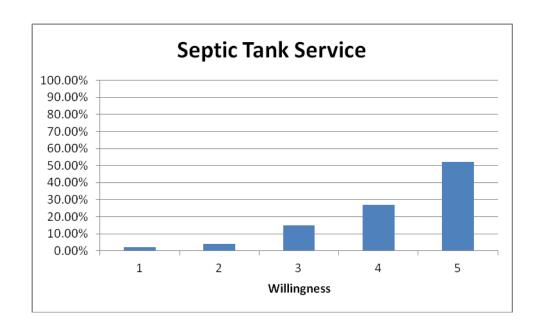


## **Having septic tank serviced every 3-5 years**

	Not Applicable	Applicable	Total
%	81.90%	18.10%	100%
n	582	129	711

	Already Do this	Not do this	Total
%	62.80%	37.20%	100%
n	81	48	129

	1 (Not Willing)	2	3	4	5 (Very willing)	Total
%	2.00%	4.00%	15.00%	27.00%	52.00%	100%
n	1	2	7	13	25	48

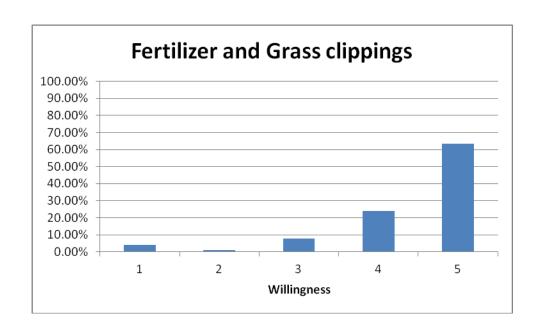


## Sweeping excess fertilizer and grass clippings from pavement onto lawn

	Not Applicable	Applicable	Total
%	25.00%	75.00%	100%
n	176	529	705

	Already Do this	Not do this	Total
%	62.80%	37.20%	100%
n	332	197	529

	1 (Not Willing)	2	3	4	5 (Very willing)	Total
%	4.10%	1.00%	7.60%	23.90%	63.40%	100%
n	8	2	15	47	125	197

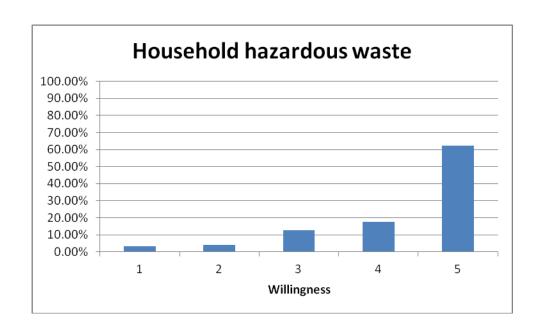


## Disposing of Household hazardous waste at a community collection day

	Not Applicable	Applicable	Total
%	4.40%	95.60%	100%
n	31	675	706

	Already Do this	Not do this	Total
%	69.60%	30.40%	100%
n	470	205	675

	1 (Not Willing)	2	3	4	5 (Very willing)	Total
%	3.40%	3.90%	12.70%	17.60%	62.40%	100%
n	7	8	26	36	128	205

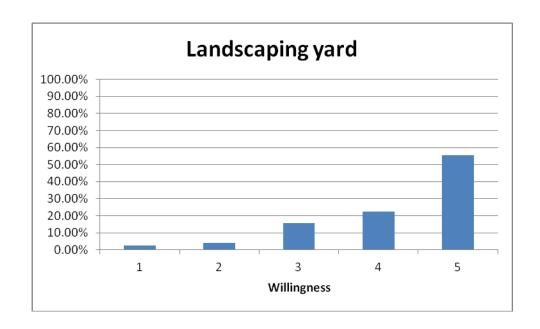


## Landscaping yard with plants native to Michigan

	Not Applicable	Applicable	Total
%	5.10%	94.90%	100%
n	36	671	707

	Already Do this	Not do this	Total
%	39.90%	60.10%	100%
n	268	403	671

		1 (Not Willing)	2	3	4	5 (Very willing)	Total
	%	2.50%	4.00%	15.60%	22.30%	55.60%	100%
ĺ	n	10	16	63	90	224	403

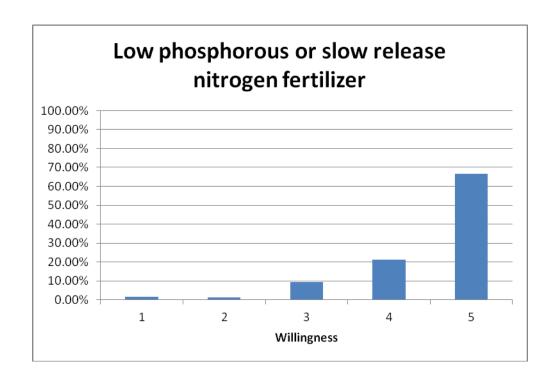


## Using low phosphorous or slow release nitrogen fertilizer on lawn

	Not Applicable	Applicable	Total
%	36.90%	63.10%	100%
n	260	445	705

	Already Do this	Not do this	Total
%	48.30%	51.70%	100%
n	215	230	445

		1 (Not Willing)	2	3	4	5 (Very willing)	Total
Ī	%	1.70%	1.30%	9.20%	21.30%	66.50%	100%
Ī	n	4	3	21	49	153	230

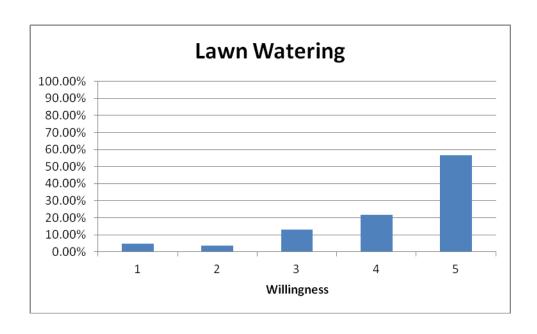


# **Changing your lawn watering practices**

	Not Applicable	Applicable	Total
%	23.30%	76.70%	100%
n	164	541	705

	Already Do this	Not do this	Total
%	47.00%	53.00%	100%
n	254	287	541

		1 (Not Willing)	2	3	4	5 (Very willing)	Total
	%	4.90%	3.50%	13.20%	21.60%	56.80%	100%
Ī	n	14	10	38	62	163	287

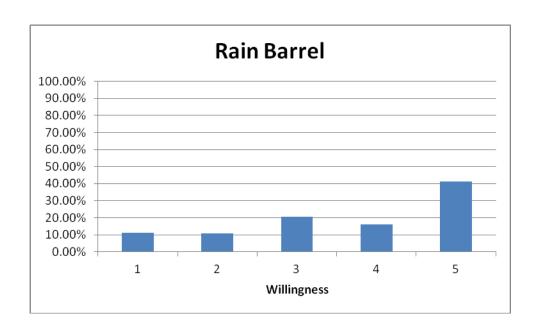


# Installing a rain barrel

	Not Applicable	Applicable	Total
%	7.60%	92.40%	100%
n	53	646	699

	Already Do this	Not do this	Total
%	31.40%	68.60%	100%
n	203	443	646

	1 (Not Willing)	2	3	4	5 (Very willing)	Total
%	11.30%	10.80%	20.60%	16.00%	41.30%	100%
n	50	48	91	71	183	443

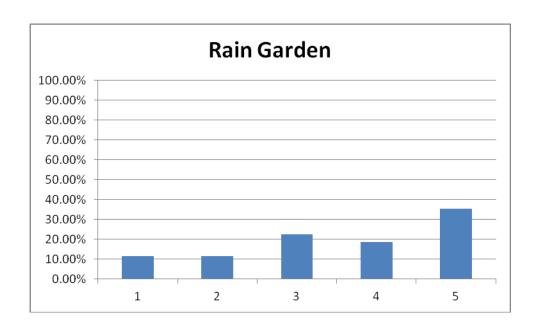


# Putting in a rain garden

	Not Applicable	Applicable	Total
%	9.70%	90.30%	100%
n	67	622	689

	Already Do this	Not do this	Total
%	14.00%	86.20%	100%
n	87	535	622

	1 (Not Willing)	2	3	4	5 (Very willing)	Total
%	11.60%	11.60%	22.60%	18.70%	35.50%	100%
n	62	62	121	100	190	535

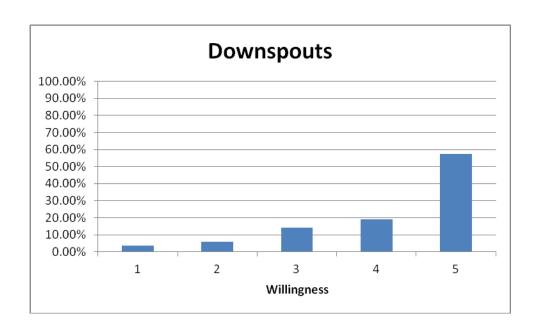


## Directing your downspouts away from paved areas and into your yard

	Not Applicable	Applicable	Total
%	7.90%	92.10%	100%
n	56	649	705

	Already Do this	Not do this	Total
%	70.30%	29.70%	100%
n	456	193	649

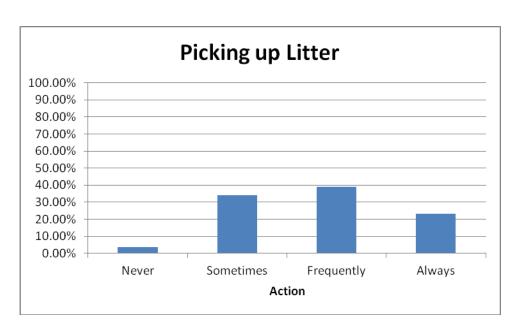
	1 (Not Willing)	2	3	4	5 (Very willing)	Total
%	3.60%	5.70%	14.00%	19.20%	57.50%	100%
n	7	11	27	37	111	193



Q29: How often do you participate in these activities?

#### **Picking up Litter**

	Never	Sometimes	Frequently	Always	Total
n	26	239	276	164	705
%	3.70%	33.90%	39.10%	23.30%	100%



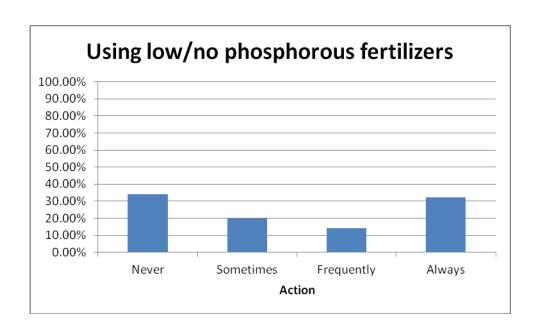
#### Fertilizing your lawn or garden

	Never	Sometimes	Frequently	Always	Total	
n	291	333	46	34	704	
%	41.30%	47.30%	6.50%	4.80%	100%	



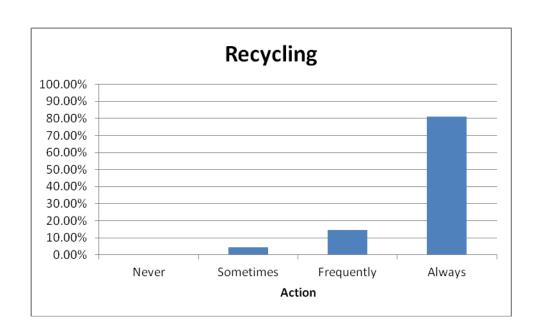
#### Using low or no phosphorous fertilizers

	Never	Sometimes	Frequently	Always	Total
n	229	133	94	216	672
%	34.10%	19.80%	14%	32.10%	100%



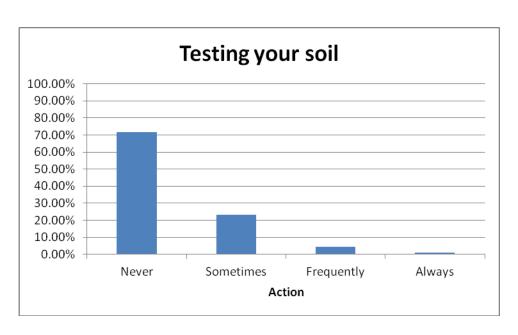
#### Recycling

	Never	Sometimes	Frequently	Always	Total
n	2	31	101	569	703
%	0.30%	4.40%	14.40%	80.90%	100%



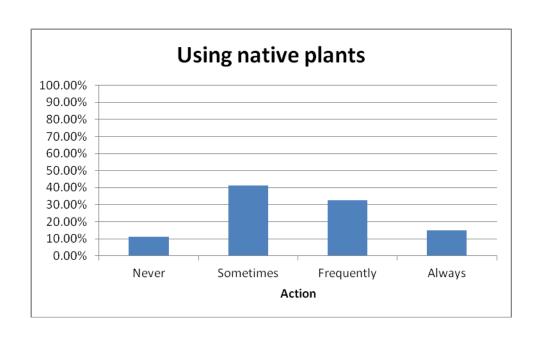
#### **Testing your soil for nutrients**

	Never	Sometimes	Frequently	Always	Total
n	500	161	30	8	699
%	71.50%	23%	4.30%	1.10%	100%



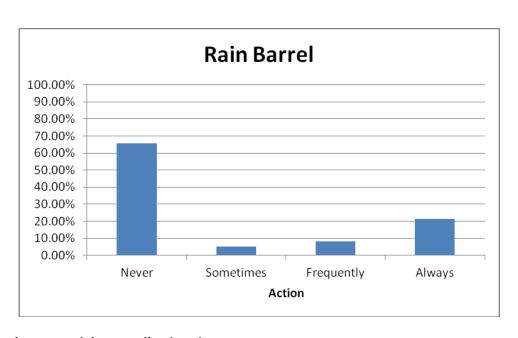
#### Using native plants in your landscaping

	Never	Sometimes	Frequently	Always	Total
n	79	287	228	104	698
%	11.30%	41.10%	32.70%	14.90%	100%



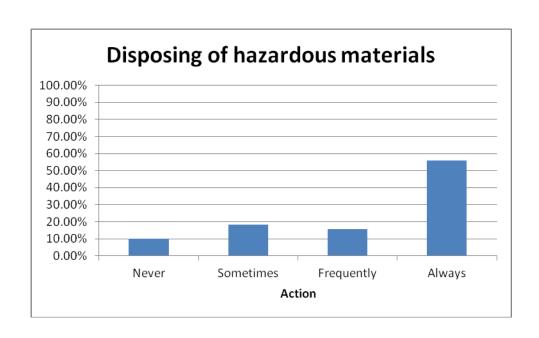
#### **Using a rain barrel**

	Never	Sometimes	Frequently	Always	Total
n	459	37	56	149	701
%	65.50%	5.30%	8%	21.30%	100%



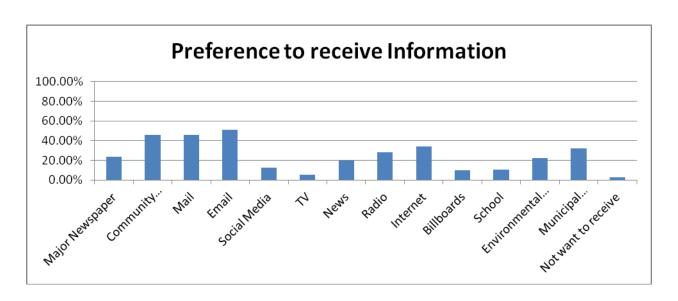
#### **Disposing of hazardous materials at a collection site**

	Never	Sometimes	Frequently	Always	Total
n	71	128	110	394	703
%	10.10%	18.20%	15.60%	56%	100%



Q30: Where would you prefer to receive information about what you can do to protect our lakes and streams?

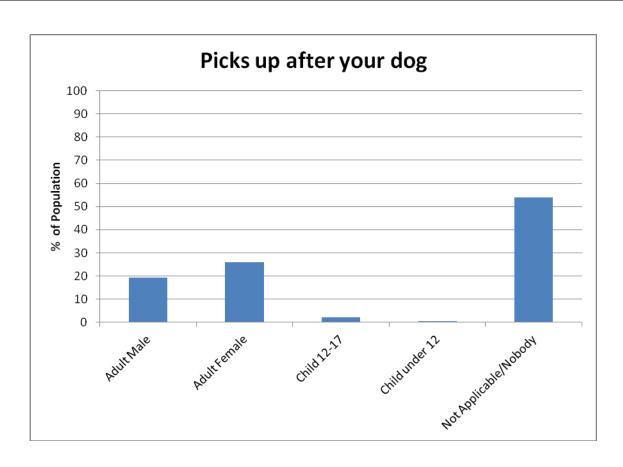
	Major Newspaper	Community Newspaper	Mail	Email	Social Media	TV	News	Radio	Internet	Billboard	School	Environmental groups	Municipal government	Not want to receive
n	175	341	340	380	95	41	146	206	254	71	78	166	238	18
%	23.60	46.00	45.80	51.20	12.80	5.50	19.70	27.80	34.20	9.60	10.50	22.40	32.10	2.40



Q 31: Which person in your household MOST frequently does the activities listed below?

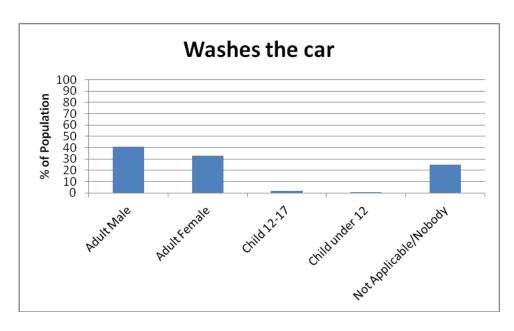
### Picks up after your dog

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	143	193	16	4	400
%	19.3	26	2.2	0.5	53.9



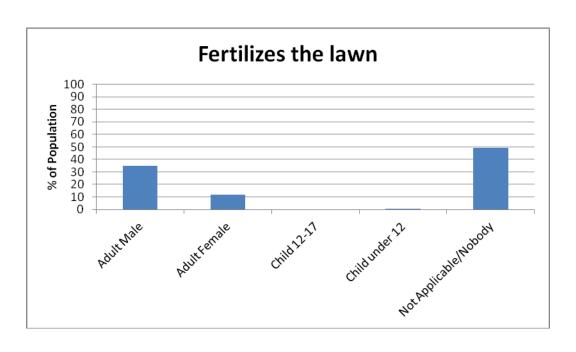
#### Washes the car

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	305	245	13	2	185
%	41.1	33	1.8	0.3	24.9



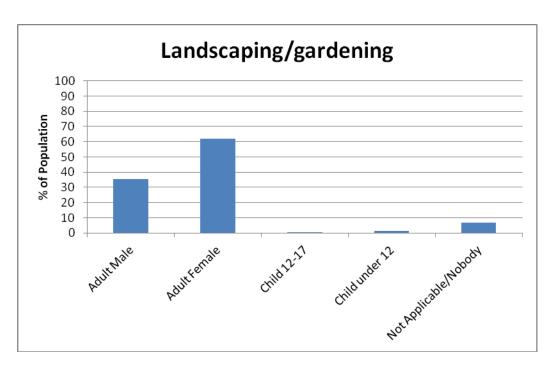
#### **Fertilizes the lawn**

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	260	86	0	1	364
%	35	11.6	0	0.1	49.1



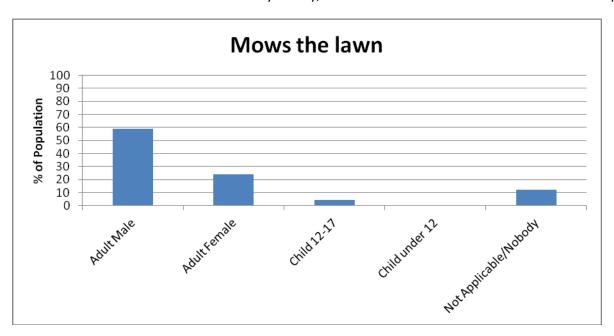
# Landscaping/gardening

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	264	461	4	10	50
%	35.6	62.1	0.5	1.3	6.7



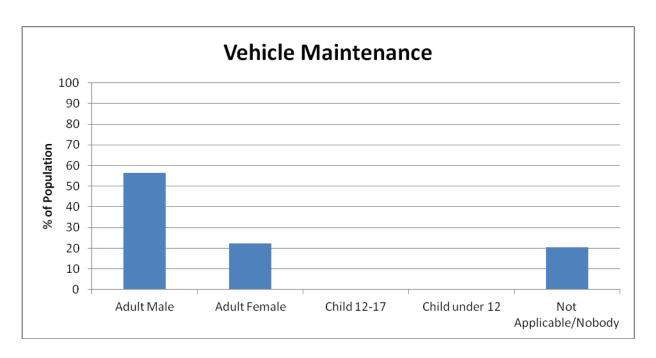
### **Mows the Lawn**

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	439	177	33	3	92
%	59.2	23.9	4.4	0.4	12.4



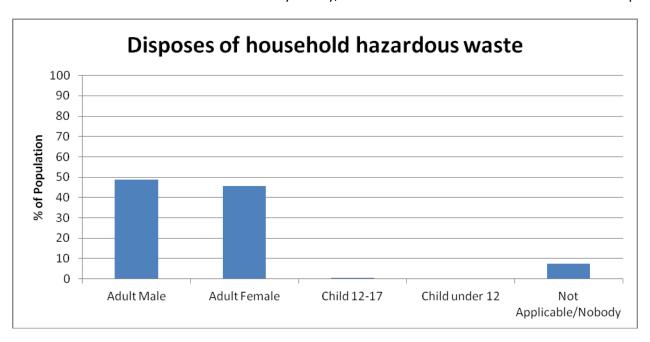
## **Vehicle Maintenance**

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	418	166	3	0	153
%	56.3	22.4	0.4	0	20.6



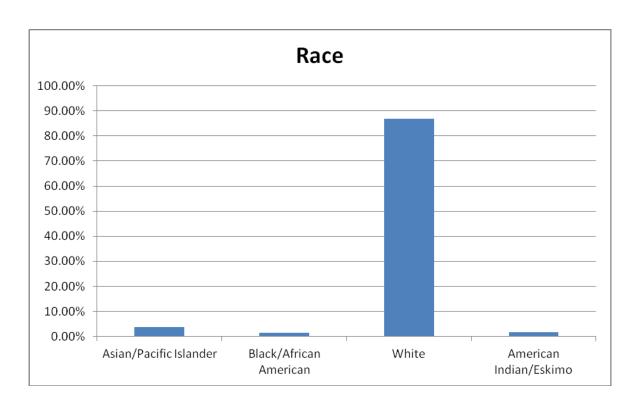
# **Disposes of household hazardous waste**

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	362	339	2	0	56
%	48.8	45.7	0.3	0	7.5



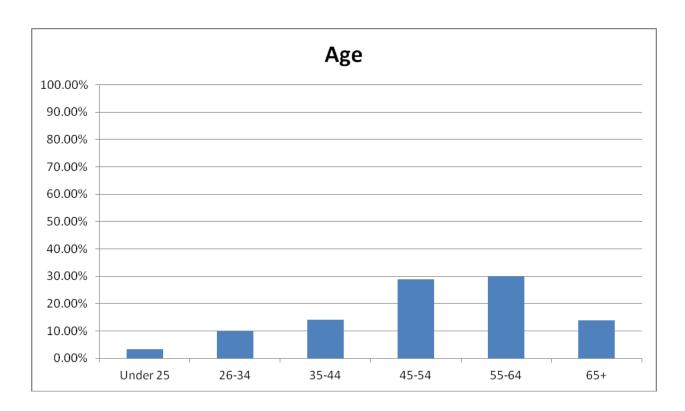
Q34: Race/Ethnicity

	Asian/Pacific Islander	Black/African American	White	American Indian/Eskimo	Other	Total
N	28	11	644	13	25	721
%	3.80%	1.50%	86.80%	1.80%	3.40%	100%



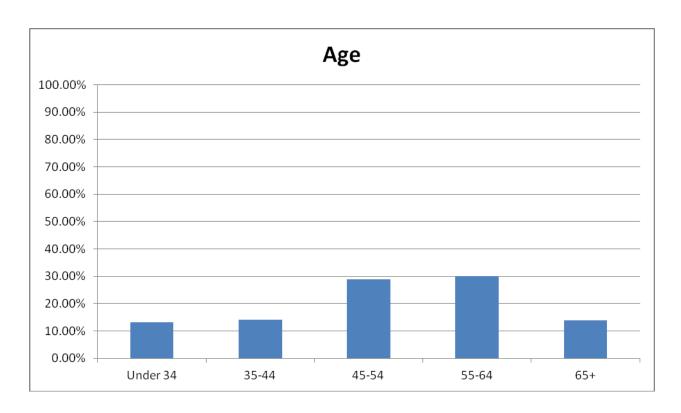
Q35: Age

	Under 25	26-34	35-44	45-54	55-64	65+	Total
N	23	70	99	203	212	98	705
%	3.30%	9.90%	14%	28.80%	30.10%	13.90%	100%



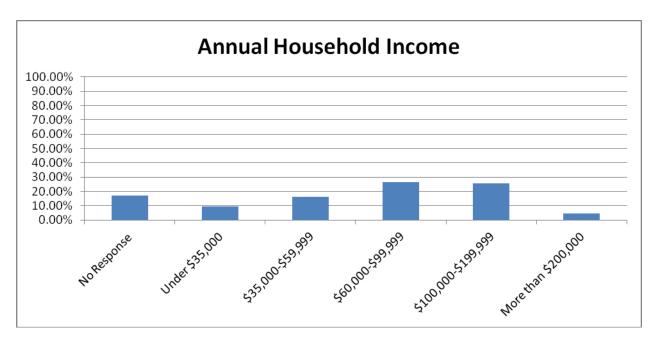
Watershed Community Survey, Huron River Watershed Council -- Total: 742 Respondents

	Under 34	35-44	45-54	55-64	65+	Total
n	93	99	203	212	98	705
%	13.20%	14%	28.80%	30.10%	13.90%	100%

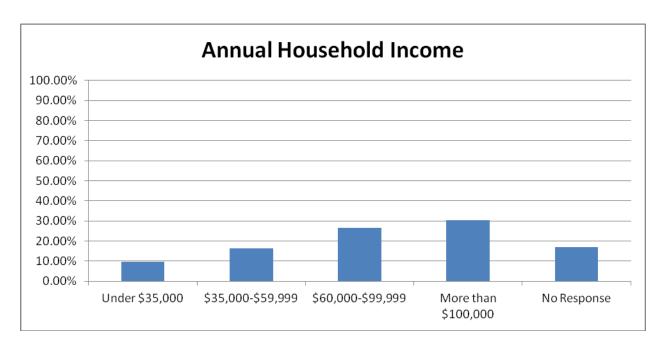


Q36: Annual Household Income

	No Response	Under \$35,000	\$35,000- \$59,999	\$60,000- \$99,999	\$100,000- \$199,999	More than \$200,000	Total
Ν	118	68	114	186	180	32	698
%	16.90%	9.70%	16.30%	26.60%	25.80%	4.60%	100%

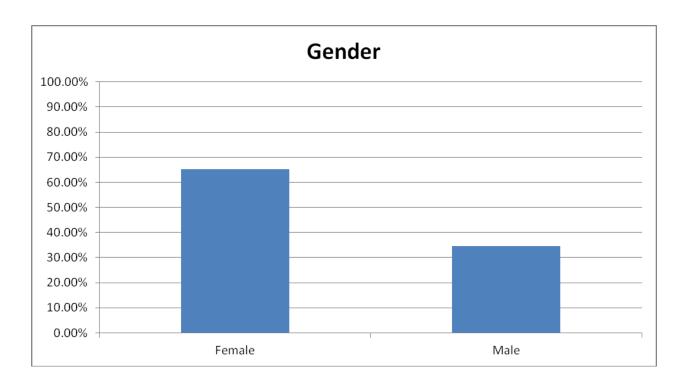


	Under \$35,000	\$35,000-\$59,999	\$60,000-\$99,999	More than \$100,000	No Response	Total
n	68	114	186	212	118	698
%	9.70%	16.30%	26.60%	30.40%	16.90%	100%



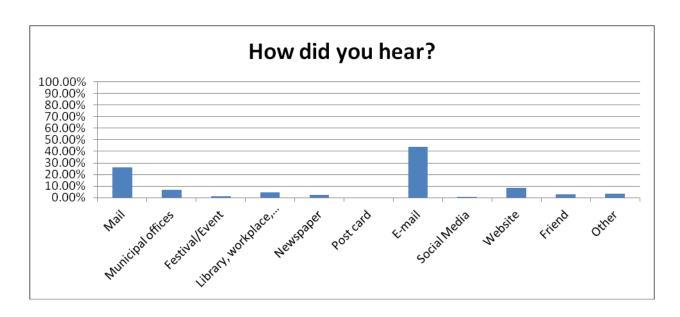
Q37: Gender

	Female	Male	Total
N	458	243	701
%	65.30%	34.70%	100.00%



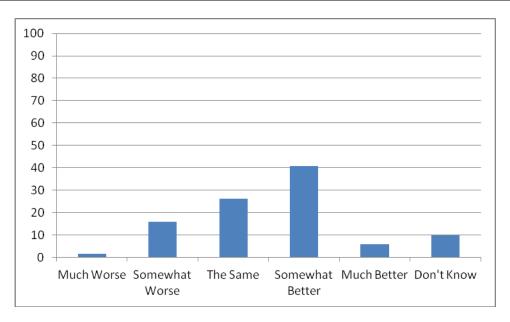
Q38: How did you hear about this survey?

		Municipal				Post		Social				
	Mail	offices	Festival/Event	Library, workplace, or retailer	Newspaper	card	E-mail	Media	Website	Friend	Other	Total
n	186	47	9	33	18	0	310	3	58	22	23	709
%	26.20	6.60	1.30	4.70	2.50	0	43.70	0.40	8.20	3.10	3.20	100



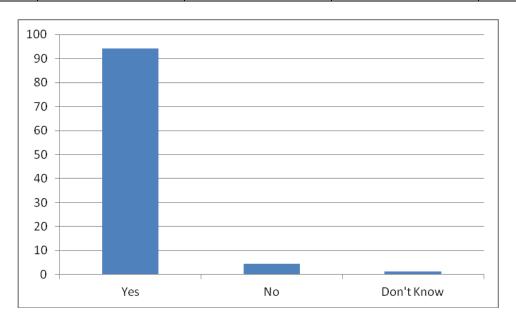
Q1: Do you think the quality of water in lakes, rivers, and streams in the community where you live is:

	Much Worse	Somewhat Worse	The Same	Somewhat Better	Much Better	Don't Know	Total
N	8	91	149	234	34	56	572
%	1.4	15.91	26.05	40.91	5.94	9.79	100



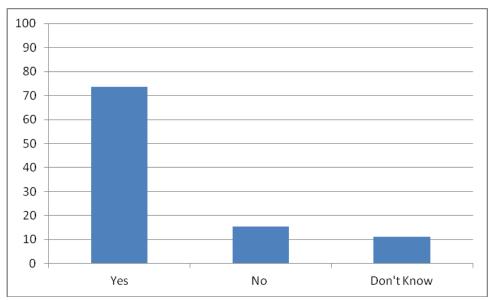
Q2: Do you think the way you care for your lawn and home affects the quality of water in lakes, rivers, and streams in the community where you live?

	Yes	No	Don't Know	Total
N	535	25	8	568
%	94.19	4.4	1.41	100



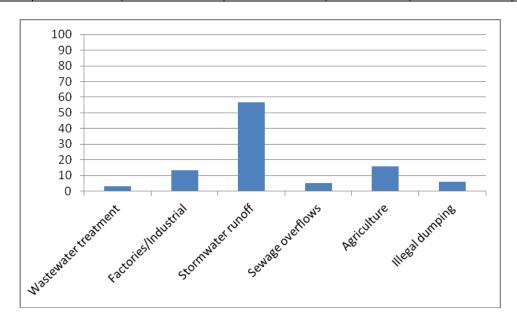
Watershed Community Survey, Huron River Watershed Council -- Washtenaw: 572 Respondents Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

	Yes	No	Don't Know	Total
N	418	87	63	568
%	73.59	15.32	11.09	100



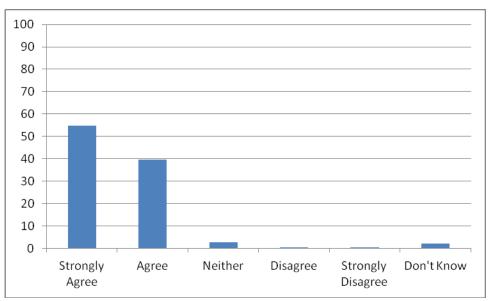
Q4: Which ONE of the following do you think contributes the MOST pollution to lakes, rivers, and streams in the community where you live?

	Wastewater treatment	Factories/ Industrial	Stormwater runoff	Sewage overflows	Agriculture	Illegal dumping	Total
N	18	75	324	29	89	35	570
%	3.16	13.16	56.84	5.09	15.61	6.14	100



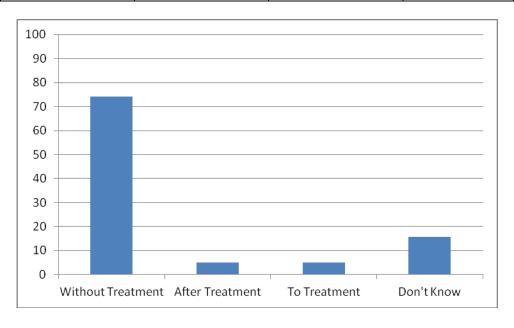
Watershed Community Survey, Huron River Watershed Council -- Washtenaw: 572 Respondents Q5: Please indicate your level of agreement with the following statement: "The quality of local streams where I live affects the Great Lakes and Lake St. Clair."

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	Don't Know	Total
N	313	226	15	1	3	12	570
%	54.91	39.65	2.63	0.18	0.53	2.11	100



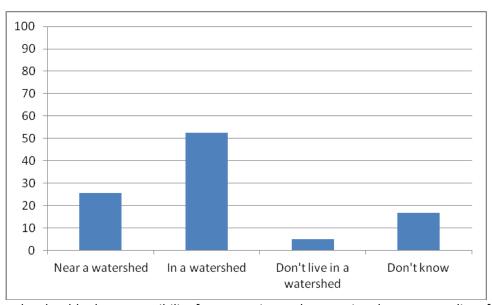
Q6: Where does stormwater (rain water) go after it enters a storm drain or roadside ditch in your community?

•	'	, 0			
	Without Treatment	After Treatment	To Treatment	Don't Know	Total
N	424	28	29	90	571
%	74.26	4.9	5.08	15.76	100



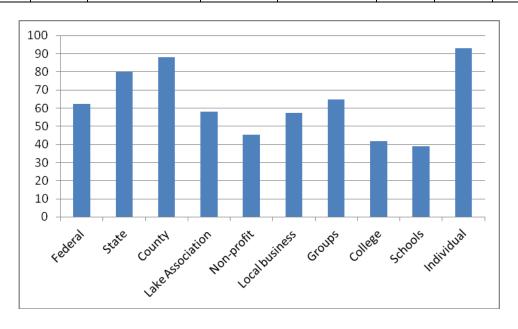
Q7: Which ONE of the following BEST describes the location where you live?

	Near a watershed	In a watershed	Don't live in a watershed	Don't know	Total
N	147	301	28	96	572
%	25.7	52.62	4.9	16.78	100



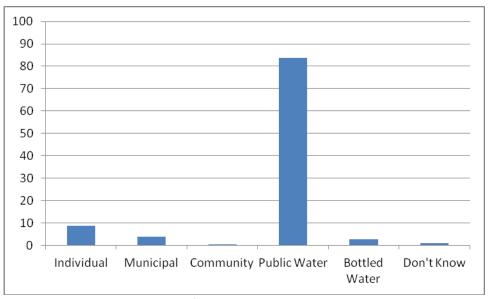
Q8: In your Opinion, who should take responsibility for protecting and preserving the water quality of lakes, rivers, and streams in the community where you live?

	Federal	State	County	Lake Association	Non-profit	Local business	Groups	College	Schools	Individual
Ν	356	458	504	332	260	327	371	238	223	531
%	62.24	80.07	88.11	58.04	45.45	57.17	64.86	41.61	38.99	92.83



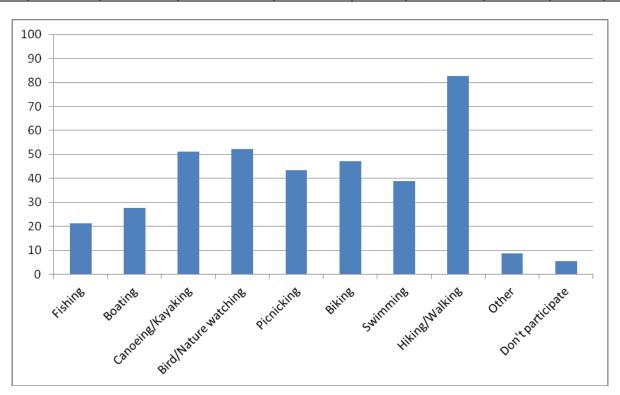
Q9: Where does your household receive its drinking water supply from?

	Individual	Municipal	Community	Public Water	Bottled Water	Don't Know	Total
N	49	22	1	478	16	5	571
%	8.58	3.85	0.18	83.71	2.8	0.88	100



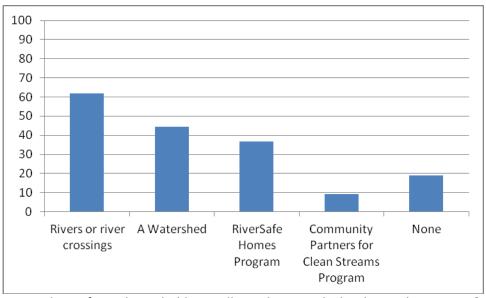
Q10: Which activities have you or other members of your household participated in or near lakes and streams in this area during the past year?

		Fishing	Boating	Canoeing/ Kayaking	Bird/Nature watching	Picnicking	Biking	Swimming	Hiking/ Walking	Other	Don't participate
F	N	122	158	293	299	248	270	223	473	50	31
Ī	%	21.33	27.62	51.22	52.27	43.36	47.2	38.99	82.69	8.74	5.42



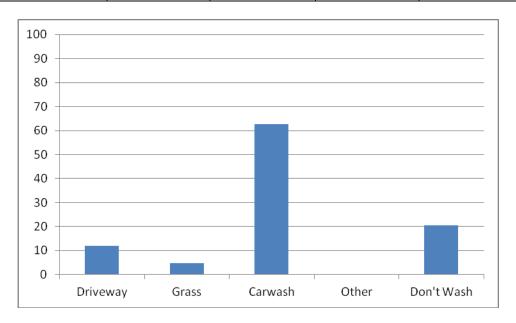
Q11: Which of the following signs have you seen in your community?

	Rivers or river A Watershed crossings		RiverSafe Homes Program		
N	354	255	209	52	109
%	61.89	44.58	36.54	9.09	19.06



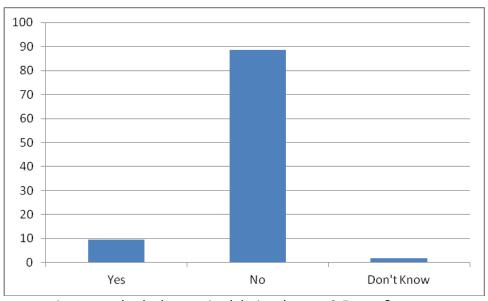
Q12: Where do you or members of your household typically wash your vehicles during the summer?

<u> </u>	,	<i>'</i>	<u>/\                                    </u>			
	Driveway	Grass	Carwash	Other	Don't Wash	Total
Ν	69	27	358	1	117	572
%	12.06	4.72	62.59	0.17	20.45	100



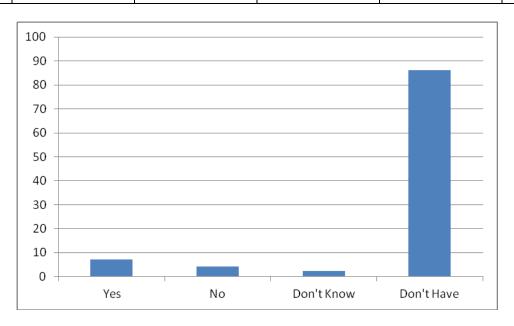
Q13: Do you have a septic system at your home?

	Yes	No	Don't Know	Total
N	54	505	11	570
%	9.47	88.6	1.93	100



Q14: Have you had your septic system checked or serviced during the past 3-5 years?

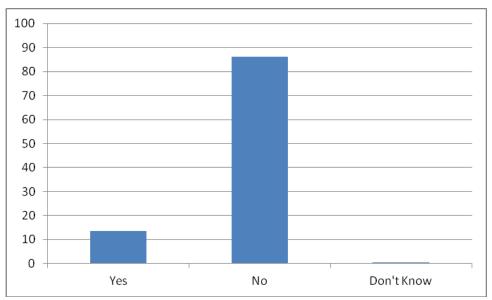
	<u>/                                    </u>		<u> </u>		
	Yes	No	Don't Know	Don't Have	Total
N	40	24	14	487	565
%	7.08	4.25	2.48	86.19	100



Watershed Community Survey, Huron River Watershed Council -- Washtenaw: 572 Respondents Q15: Do you or other members of your household usually change motor oil, transmission fluid, or radiator fluid for a

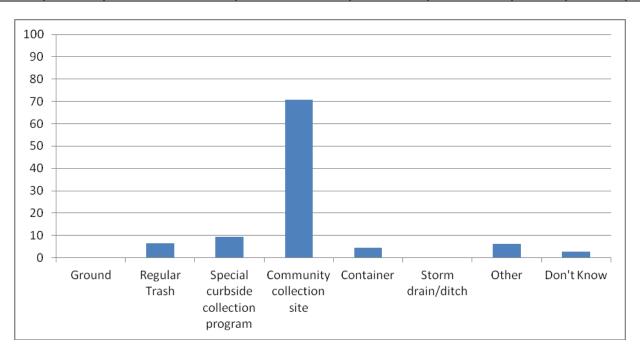
vehicle at your home?

	Yes	No	Don't Know	Total
N	77	493	2	572
%	13.46	86.19	0.35	100



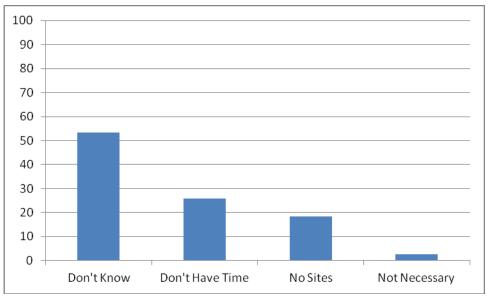
Q16: Where does your household typically dispose of materials, such as old oil or fluids from your vehicle, batteries, pesticides, and other household hazardous wastes?

	Ground	Regular Trash	Special curbside collection program	Community collection site	Container	Storm drain/ditch	Other	Don't Know	Total
N	0	37	54	404	25	0	35	16	572
%	0	6.48	9.46	70.75	4.38	0	6.13	2.8	100



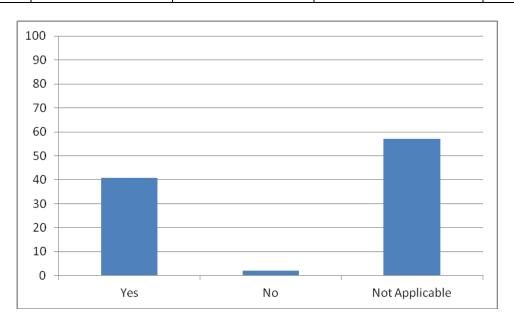
Q17: Why doesn't your household typically dispose of household hazardous waste at a community collection site?

	Don't Know	Don't Have Time	No Sites	Not Necessary	Total
N	64	31	22	3	120
%	53.33	25.83	18.33	2.5	100



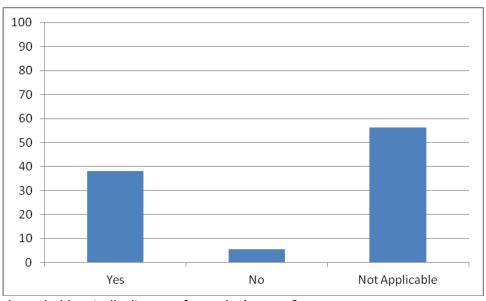
Q18: Do you or other members of your household typically pick up your dog's waste when you go for a walk?

	Yes	No	Not Applicable	Total
N	N 233		327	572
%	40.73	2.1	57.17	100



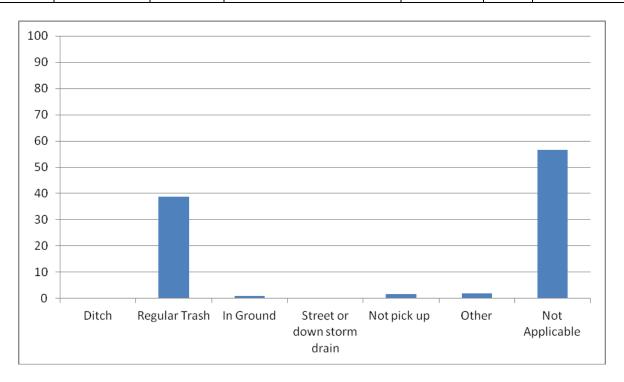
Q19: Do you or other members of your household typically pick up your dog's waste from your yard?

	Yes	No	Not Applicable	Total
N	218	31	322	571
%	38.18	5.43	56.39	100



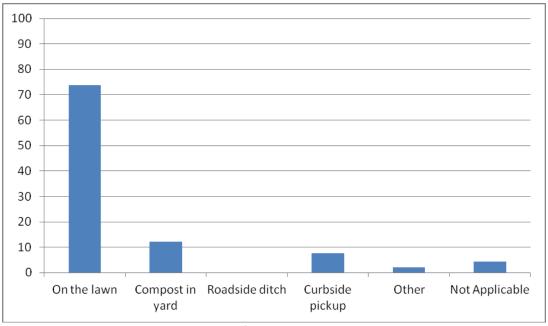
Q20: How does your household typically dispose of your dog's waste?

-(	,		, p ,					
	Ditch	Regular Trash	In Ground	Street or down storm drain	Not pick up	Other	Not Applicable	Total
Ν	1	221	6	0	9	11	323	571
%	0.18	38.7	1.05	0	1.58	1.93	56.57	100



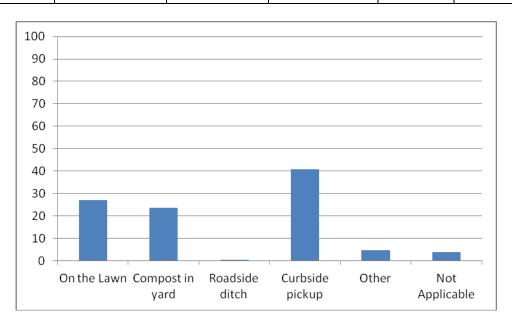
Q21: What does your household typically do with your grass clippings?

	On the lawn	Compost in yard	Roadside ditch	Curbside pickup	Other	Not Applicable	Total
N	421	69	0	44	12	25	571
%	73.73	12.08	0	7.71	2.1	4.38	100



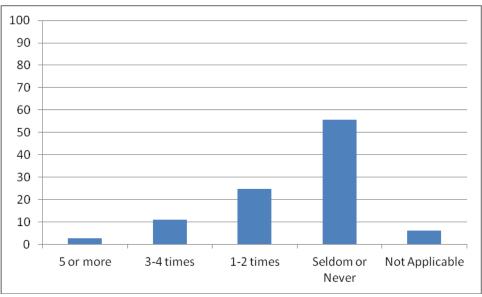
Q22: What does your household typically do with your fall leaves?

QZZ: TTHAT	acco your nous	remota typicany ac	with your runned.	<b>C</b> 5.			
	On the Lawn	Compost in yard	Roadside ditch	Curbside pickup	Other	Not Applicable	Total
N	154	135	1	233	26	22	571
%	26.97	23.64	0.18	40.81	4.55	3.85	100



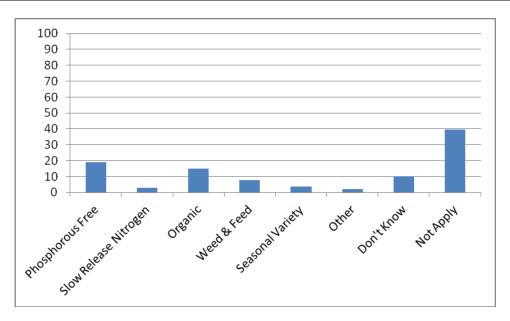
Q23: Which of the following BEST describes how often your household fertilizes your lawn?

	5 or more	3-4 times	1-2 times	Seldom or Never	Not Applicable	Total
N	15	63	141	317	35	571
%	2.63	11.03	24.69	55.52	6.13	100



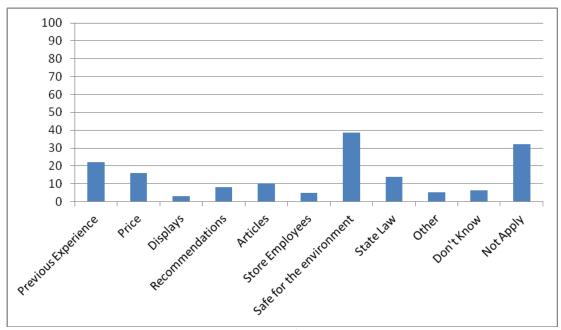
Q24: Which of the following types of fertilizer does your household use?

	Phosphorous	Slow Release	Organic	Weed &	Seasonal	Other	Don't	Not	Total
	Free	Nitrogen	0.80	Feed	Variety	•	Know	Apply	
N	107	17	86	43	21	12	58	224	568
%	18.84	2.99	15.14	7.57	3.7	2.11	10.21	39.44	100



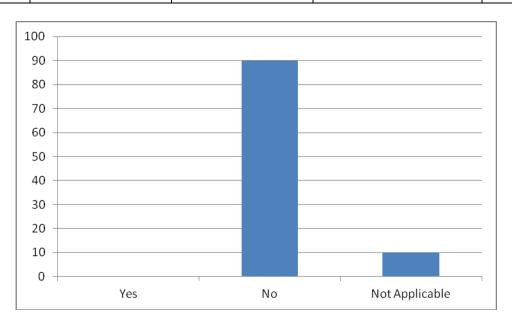
Q25: Which of the following reasons influence the type of fertilizer or pesticide your household uses most?

					- t/pc -	: с. с д	esticiae your no				
	Previous	Price	Display	Recommend	Article	Store	Safe for the	State	Other	Don't	Not
	Experience	FIICE	Display	ation		Employee	environment	Law	Other	Know	Apply
Ν	126	92	17	46	58	28	220	80	30	36	183
%	22.03	16.08	2.97	8.04	10.14	4.9	38.46	13.99	5.24	6.29	31.99



Q26: Does your household use a lawn service for fertilizer and/or pesticide applications?

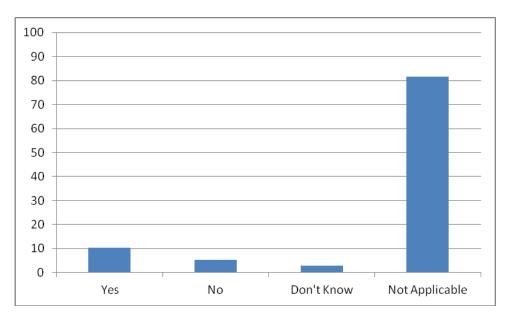
,	Yes No		Not Applicable	Total
N	N O		57	570
%	% 0		10	100



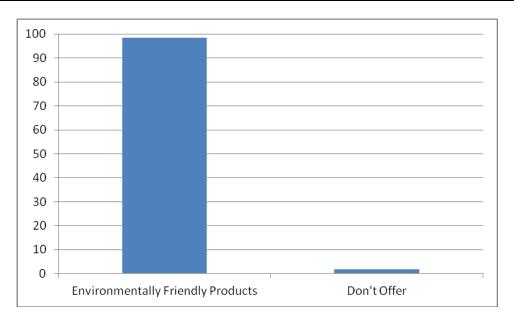
Watershed Community Survey, Huron River Watershed Council -- Washtenaw: 572 Respondents

Q27: Does your household ask your lawn service to use environmentally friendly/organic products and practices?

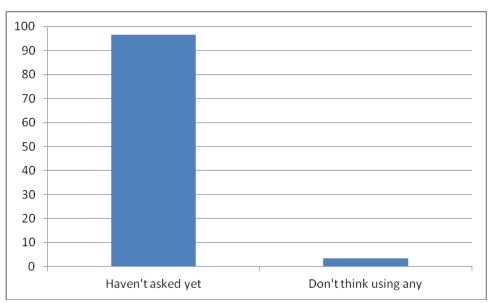
	Yes	No	Don't Know	Not Applicable	Total
N	59	30	16	466	571
%	10.34	5.26	2.8	81.61	100



	Environmentally Friendly Products	Don't Offer	Total
N	58	1	59
%	98.31	1.69	100



	Haven't asked yet	Don't think using any	Total
N	29	1	30
%	96.67	3.33	100



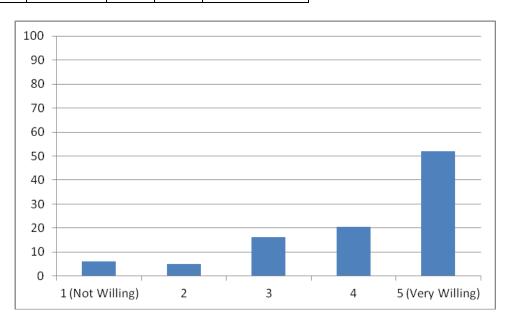
Q28: Several ways that residents can help reduce pollution of streams and lakes in their community are listed below.

**Changing car wash practices** 

	Not Applicable	Applicable	Total
Ν	64	500	564
%	11.35	88.65	100

	Already Do This	Not do this
N	286	214
%	57.2	42.8

	1 (Not Willing)	2	3	4	5 (Very Willing)
N	13	11	35	44	111
%	6.07	5.14	16.36	20.56	51.87

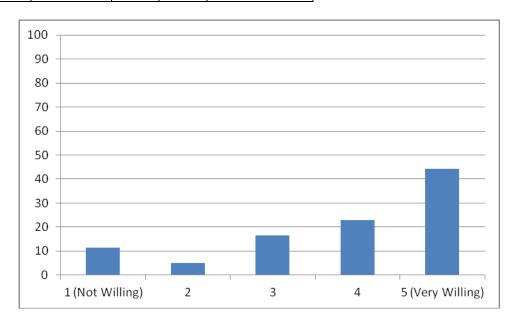


Promptly picking up and disposing of pet waste

	Not Applicable	Applicable	Total
N	310	258	564
%	54.58	45.42	100

	Already Do This	Not do this
N	197	61
%	76.36	23.04

	1 (Not Willing)	2	3	4	5 (Very Willing)
N	7	3	10	14	27
%	11.48	4.92	16.39	22.95	44.26

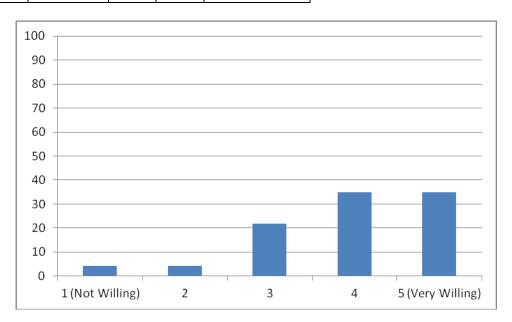


**Having septic tank serviced every 3-5 years** 

	Not Applicable	Applicable	Total
N	512	58	570
%	89.82	10.18	100

	Already Do This	Not do this
N	35	23
%	60.34	39.66

		1 (Not Willing)	2	3	4	5 (Very Willing)
	Ζ	1	1	5	8	8
Ī	%	4.35	4.35	21.74	34.78	34.78

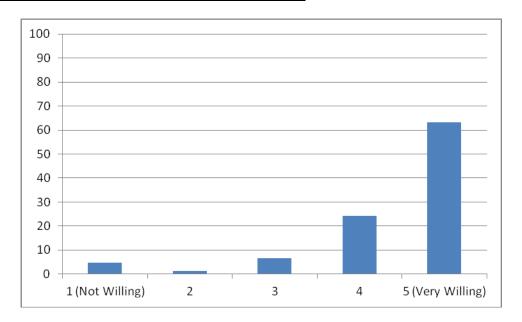


Sweeping excess fertilizer and grass clippings from pavement onto lawn

	Not Applicable	Applicable	Total
N	142	424	566
%	25.09	74.91	100

	Already Do This	Not do this
N	255	169
%	60.14	39.86

	1 (Not Willing)	2	3	4	5 (Very Willing)
Ν	8	2	11	41	107
%	4.73	1.18	6.51	24.26	63.31

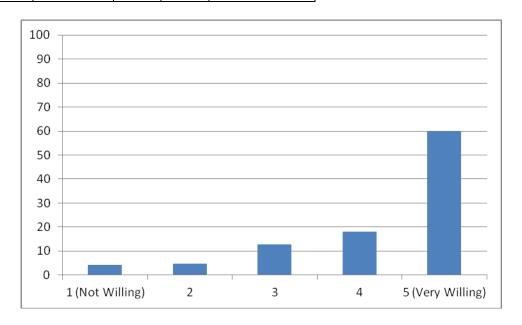


Disposing of household hazardous waste at a community collection day

	Not Applicable	Applicable	Total
N	26	539	565
%	4.6	95.4	100

	Already Do This	Not do this
N	374	165
%	69.39	30.61

	1 (Not Willing)	2	3	4	5 (Very Willing)
Ζ	7	8	21	30	99
%	4.24	4.85	12.73	18.18	60

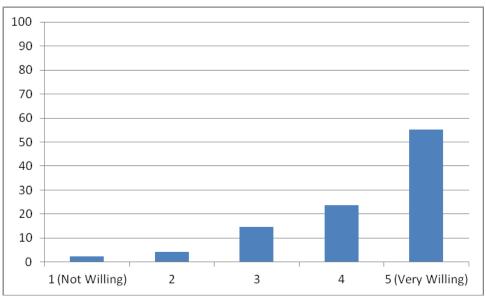


Landscaping yard with plants native to Michigan

	Not Applicable	Applicable	Total
N	31	537	568
%	5.46	94.54	100

	Already Do This	Not do this
N	207	330
%	38.55	61.45

	1 (Not Willing)	2	3	4	5 (Very Willing)
Ζ	8	14	48	78	182
%	2.42	4.24	14.55	23.64	55.15

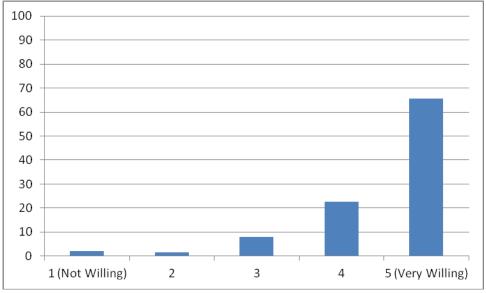


Using low phosphorus or slow release nitrogen fertilizer on lawn

	Not Applicable	Applicable	Total
Z	210	357	567
%	37.04	62.96	100

	Already Do This	Not do this
N	171	186
%	47.9	52.1

	1 (Not Willing)	2	3	4	5 (Very Willing)
N	4	3	15	42	122
%	2.15	1.61	8.06	22.58	65.59

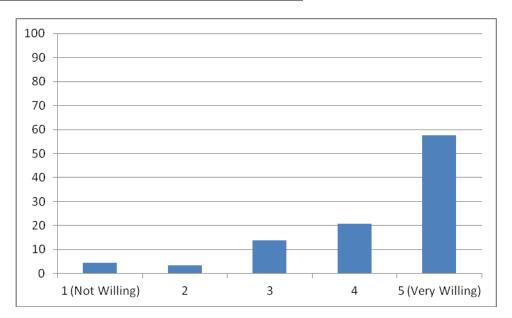


### **Changing your lawn watering practices**

	Not Applicable	Applicable	Total
N	131	435	566
%	23.14	76.86	100

	Already Do This	Not do this
N	209	226
%	48.05	51.95

	1 (Not Willing)	2	3	4	5 (Very Willing)
N	10	8	31	47	130
%	4.42	3.54	13.72	20.8	57.52

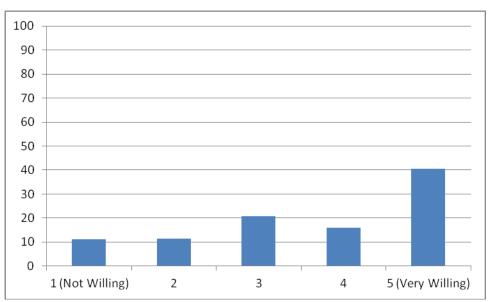


**Installing a rain barrel** 

	Not Applicable	Applicable	Total
Ν	44	516	560
%	7.86	92.14	100

	Already Do This	Not do this
N	169	347
%	32.75	67.25

	1 (Not Willing)	2	3	4	5 (Very Willing)
Ζ	39	40	72	55	141
%	11.24	11.53	20.75	15.85	40.63



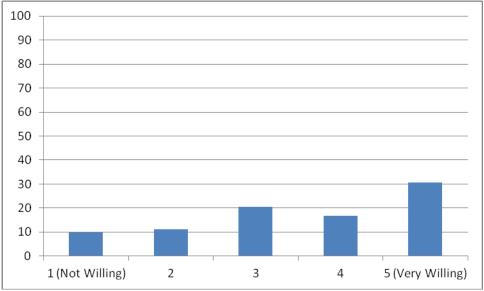
Putting in a rain garden

	Not Applicable	Applicable	Total
Ν	53	499	552
%	9.6	90.4	100

	Already Do This	Not do this
Ν	70	482
%	12.68	87.32

	1 (Not Willing)	2	3	4	5 (Very Willing)
Ν	47	54	99	81	148
%	9.75	11.2	20.54	16.8	30.71

Watershed Community Survey, Huron River Watershed Council -- Washtenaw: 572 Respondents

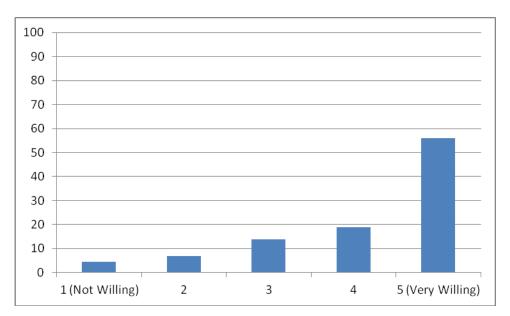


Directing your downspouts away from paved areas and into your yard

	Not Applicable	Applicable	Total
N	44	522	566
%	7.77	92.23	100

	Already Do This	Not do this
Ν	363	159
%	69.54	30.46

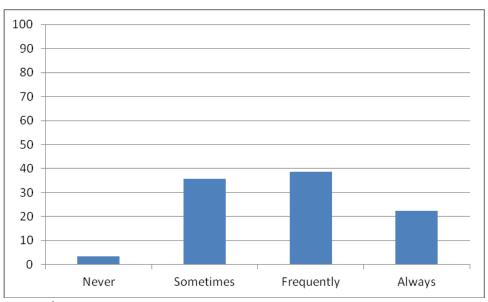
	1 (Not Willing)	2	3	4	5 (Very Willing)
Ν	7	11	22	30	89
%	4.4	6.92	13.84	18.87	55.97



Q29: How often do you participate in these activities?

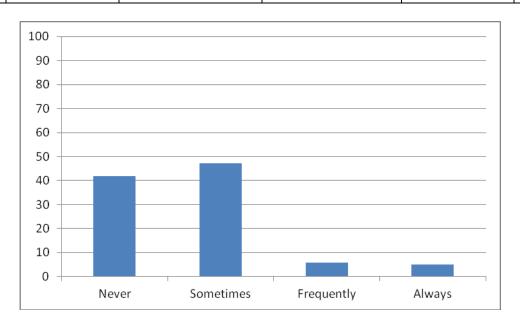
Picking up litter

	Never	Sometimes	Frequently	Always	Total
N	19	202	218	126	565
%	3.36	35.75	38.58	22.3	100



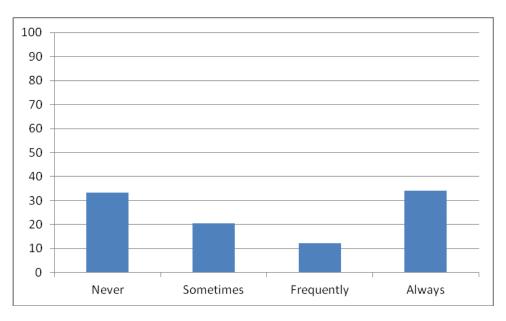
Fertilizing your lawn or garden

	The state of the s						
	Never	Sometimes	Frequently	Always	Total		
N	237	267	33	28	565		
%	41.95	47.26	5.84	4.96	100		



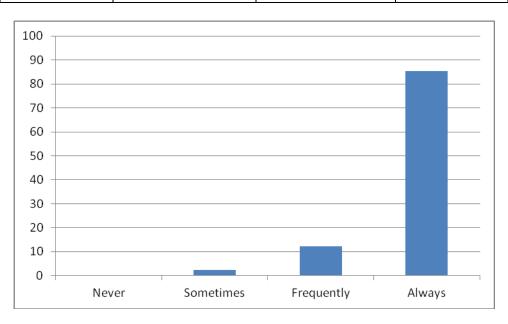
Using low or no phosphorus fertilizers

	Never	Sometimes	Frequently	Always	Total
N	180	110	66	184	540
%	33.33	20.37	12.22	34.07	100



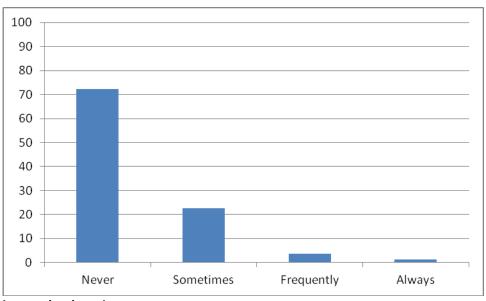
Recycling

	Never	Sometimes	Frequently	Always	Total
N	1	13	69	481	564
%	0.18	2.3	12.23	85.28	100



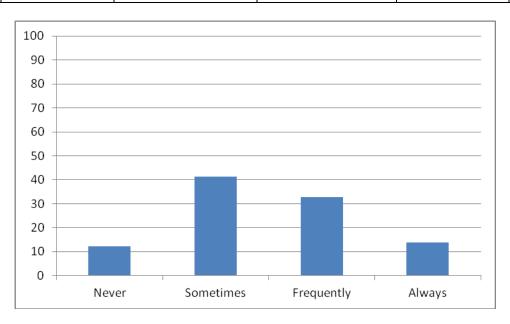
**Testing your soil for nutrients** 

	Never	Sometimes	Frequently	Always	Total
N	405	127	21	7	560
%	72.32	22.68	3.75	1.25	100



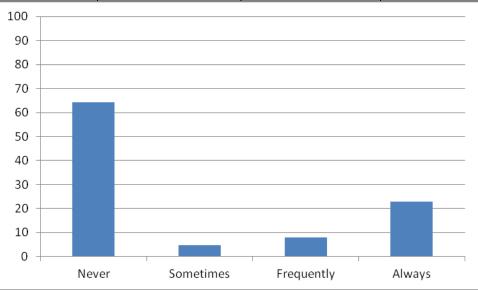
Using native plants in your landscaping

_							
		Never	Sometimes	Frequently	Always	Total	
Ī	N	68	232	184	77	561	
	%	12.12	41.35	32.8	13.73	100	



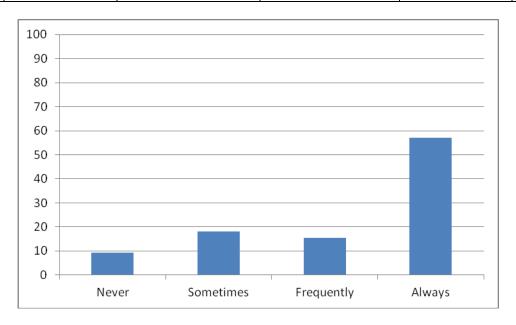
**Using a rain barrel** 

	Never	Sometimes	Frequently	Always	Total
N	361	27	45	129	562
%	64.23	4.8	8.01	22.95	100



Disposing of hazardous materials at a colletion site

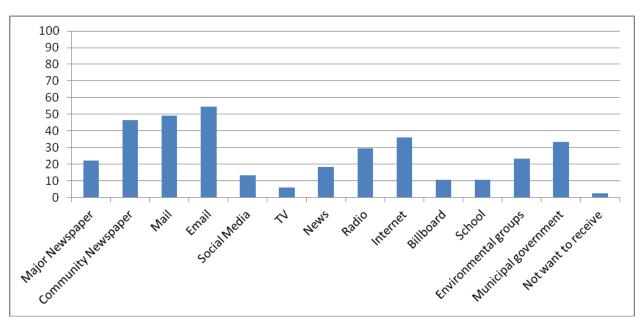
	Never	Sometimes	Frequently	Always	Total
N	52	102	87	322	563
%	9.24	18.12	15.45	57.19	100



Watershed Community Survey, Huron River Watershed Council -- Washtenaw: 572 Respondents

Q30: Where would you prefer to receive information about what you can do to protect our lakes and streams?

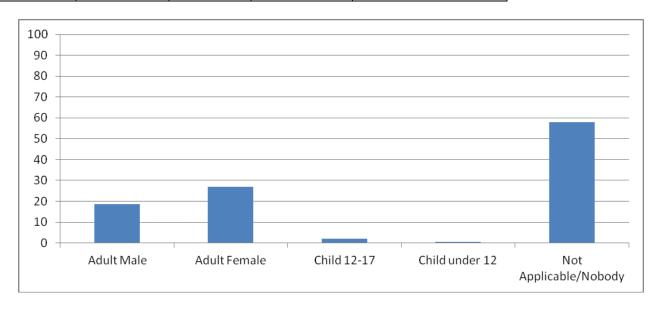
	Major	Community	Mail	Email	Social	T\/	News	Radio	Internet	Billboard	School	Environmental	Municipal	Not want
	Newspaper	Newspaper	iviali	Liliali	Media	1 V	ivews	Naulo	Internet	ыньоаги	3011001	groups	government	to receive
N	127	265	282	311	76	35	104	169	206	60	60	133	190	14
%	22.2	46.33	49.3	54.37	13.29	6.12	18.18	29.55	36.01	10.49	10.49	23.25	33.22	2.45



Q31: Which person in your household MOST frequently does the activities listed below?

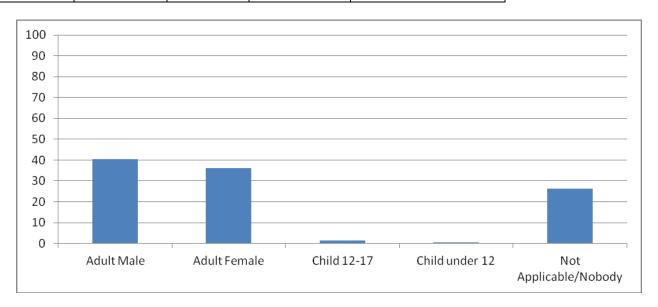
### Picks up after your dog

		Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
ſ	Z	106	154	12	2	331
9	%	18.53	26.92	2.1	0.35	57.87



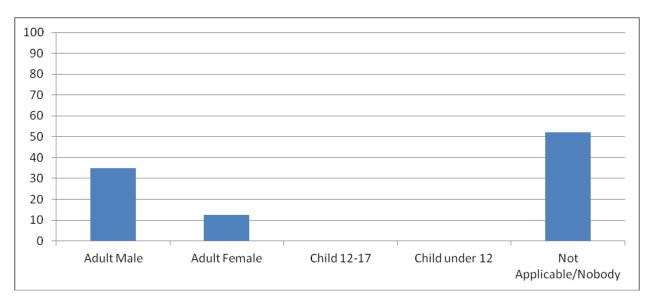
#### Washes the car

- 0										
		Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody				
	N	231	206	9	2	151				
	%	40.38	36.01	1.57	0.35	26.4				



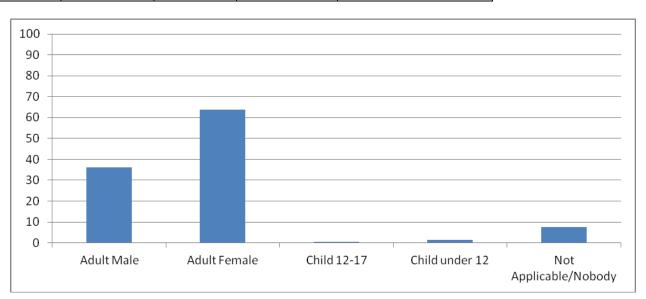
Fertilizes the lawn

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
Ν	200	71	0	1	298
%	34.97	12.41	0	0.17	52.1



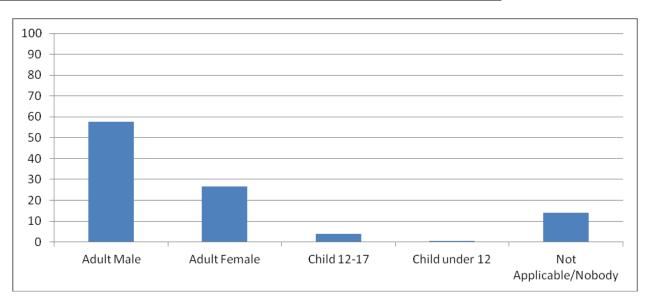
Landscaping/gardening

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
Ν	206	365	2	8	43
%	36.01	63.81	0.35	1.4	7.52



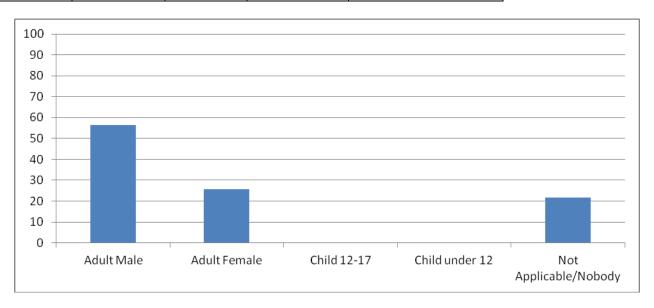
### Mows the lawn

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	330	152	23	3	81
%	57.69	26.57	4.02	0.52	14.16



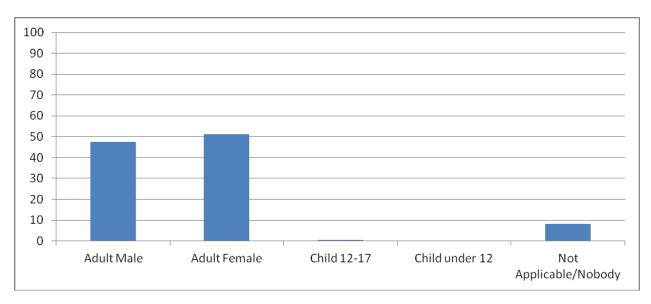
### **Vehicle maintenance**

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	322	147	1	0	124
%	56.29	25.7	0.17	0	21.68



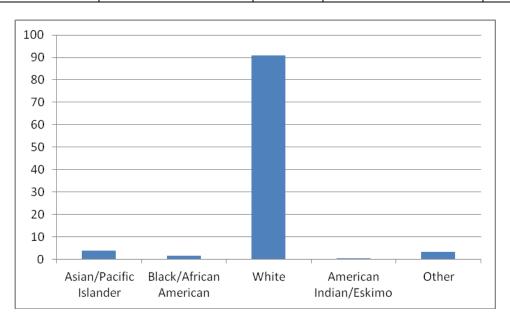
Disposes of household hazardous waste

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
Ν	272	293	2	0	46
%	47.55	51.22	0.35	0	8.04



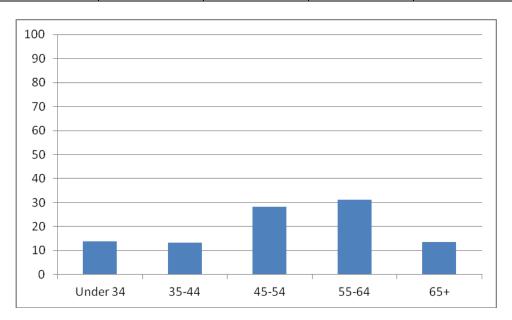
Q34: Which of the following best describes your race/ethnicity (check all that apply)?

	Asian/Pacific Islander	Black/African American	White	American Indian/Eskimo	Other	Total
N	22	9	513	2	18	564
%	3.9	1.6	90.96	0.35	3.19	100



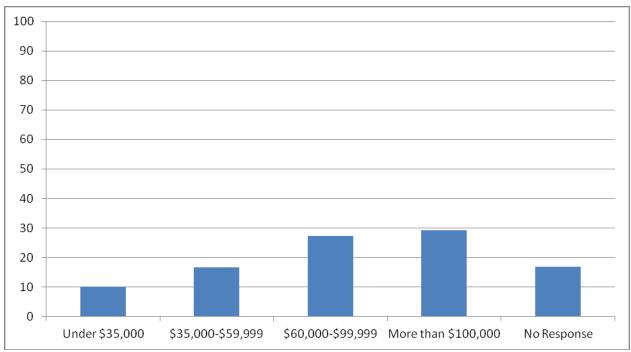
Q35: What is your age?

	Under 34	35-44	45-54	55-64	65+	Total
N	79	75	160	177	77	568
%	13.91	13.2	28.17	31.16	13.56	100



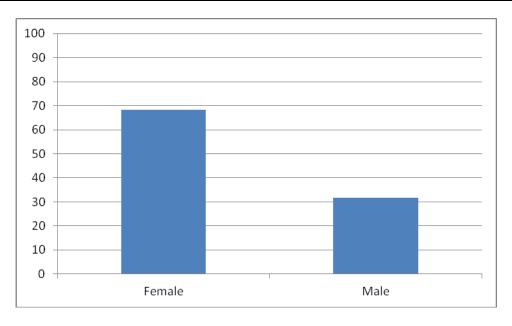
Q36: Would you say your annual household income is:

	Under \$35,000	\$35,000-\$59,999	\$60,000-\$99,999	More than \$100,000	No Response	Total
N	57	93	154	164	95	563
%	10.12	16.52	27.35	29.13	16.87	100



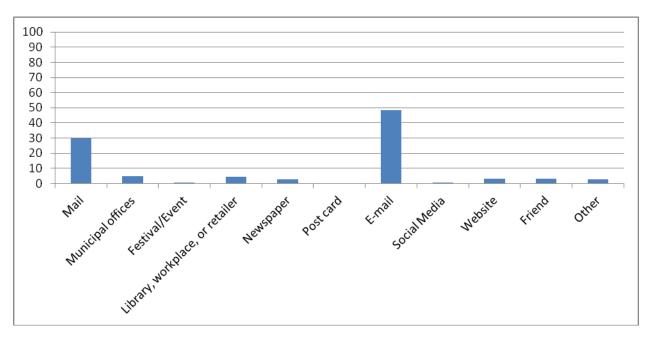
Q37: Your Gender:

	Female	Male	Total
N	387	180	567
%	68.25	31.75	100



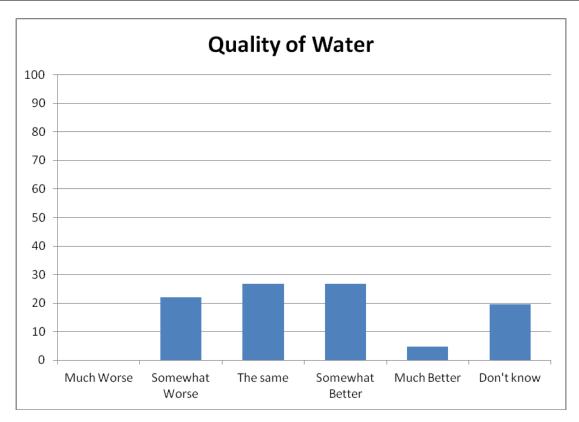
Q38: How did you hear about this survey?

	Mail	Municipal offices	Festival/ Event	Library, workplace, or retailer	Newspaper	Post card	E-mail	Social Media	Website	Friend	Other	Total
Ν	169	28	4	25	16	0	275	2	18	18	15	570
%	29.65	4.91	0.7	4.39	2.81	0	48.25	0.35	3.16	3.16	2.63	100



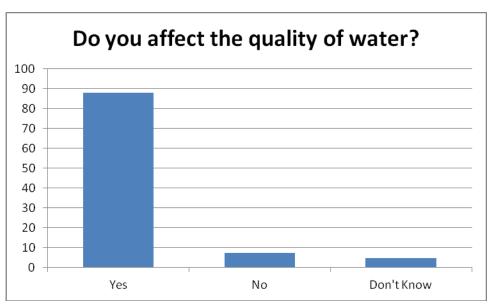
Q1: Do you think the quality of water in lakes, rivers, and streams in the community where you live is:

	Much Worse	Somewhat Worse	The same	Somewhat Better	Much Better	Don't know	Total
N	0	9	11	11	2	8	41
%	0	21.95	26.83	26.83	4.88	19.51	100



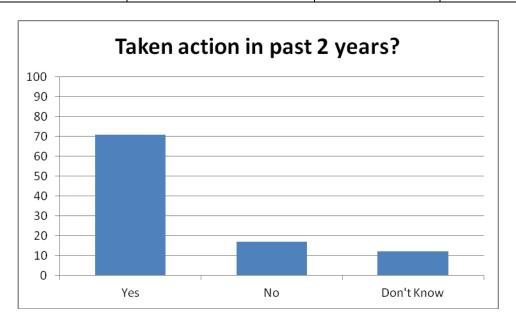
Q2: Do you think the way you care for your lawn and home affects the quality of water in lakes, rivers, and streams in the community where you live?

	Yes	No	Don't Know	Total
N	36	3	2	41
%	87.8	7.32	4.88	100



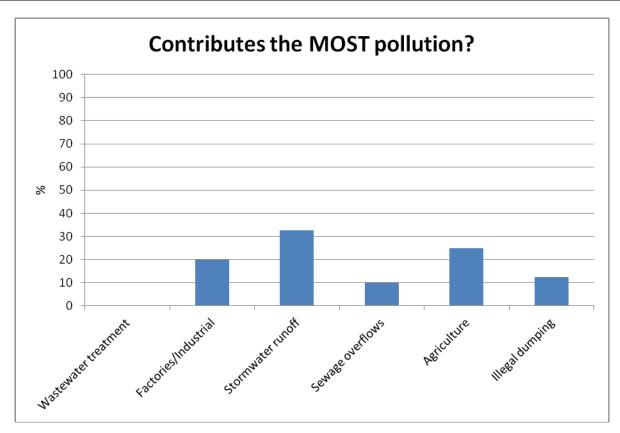
Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

	Yes	No	Don't Know	Total
N	29	7	5	41
%	70.73	17.07	12.2	100



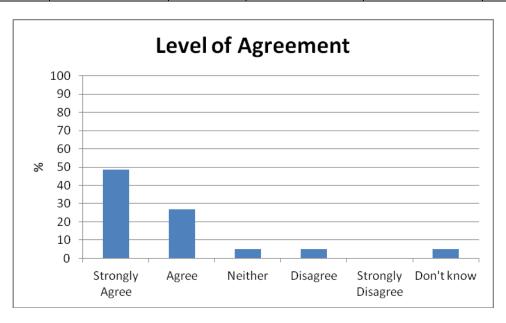
Q4: Which ONE of the following do you think contributes the MOST pollution to lakes, rivers and streams in the community where you live?

	Wastewater treatment	Factories/ Industrial	Stormwater runoff	Sewage overflows	Agriculture	Illegal dumping	Total
Ν	0	8	13	4	10	5	40
%	0	20	32.5	10	25	12.5	100



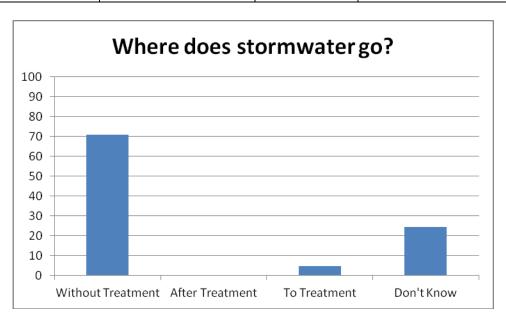
Q5: Please indicate your level of agreement with the following statement: "The quality of local streams where I live affects the Great Lakes and Lake St. Clair."

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	Don't know	Total
N	24	11	2	2	0	2	41
%	48.54	26.83	4.88	4.88	0	4.88	100



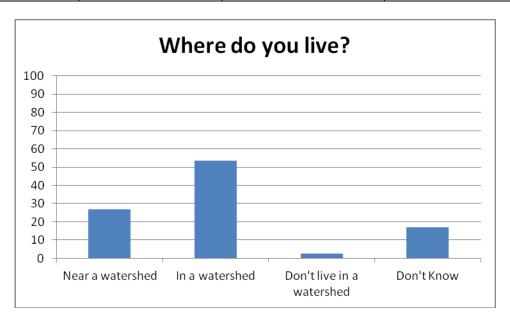
Q6: Where does stormwater (rain water) go after it enters a storm drain or roadside ditch in your community?

	Without Treatment	After Treatment	To Treatment	Don't Know	Total
N	29	0	2	10	41
%	70.73	0	4.88	24.39	100



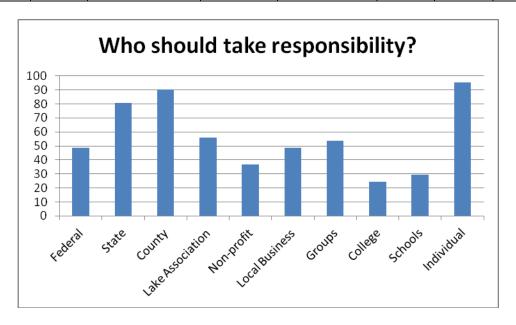
Q7: Which ONE of the following BEST describes the location where you live?

	Near a watershed	In a watershed	Don't live in a watershed	Don't Know	Total
N	11	22	1	7	41
%	26.83	53.66	2.44	17.07	100



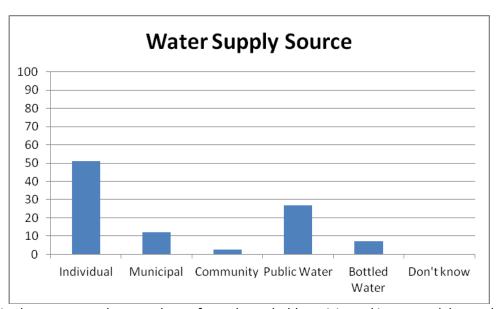
Q8: In your opinion, who should take responsibility for protecting and preserving the water quality of lakes, rivers, and streams in the community where you live? Multiple responses are allowed.

	Federal	State	County	Lake Association	Non-profit	Local Business	Groups	College	Schools	Individual
Ν	20	33	37	23	15	20	22	10	12	39
%	48.78	80.49	90.24	56.1	36.59	48.78	53.66	24.39	29.27	95.12



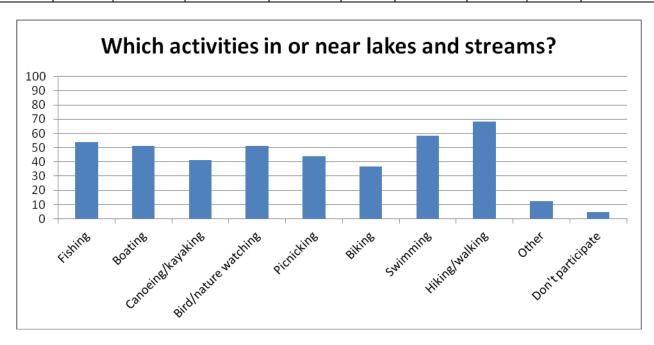
Q9: Where does your household receive its drinking water supply from?

	Individual	Municipal	Community	Public Water	Bottled Water	Don't know	Total
N	21	5	1	11	3	0	41
%	51.22	12.2	2.44	26.83	7.32	0	100



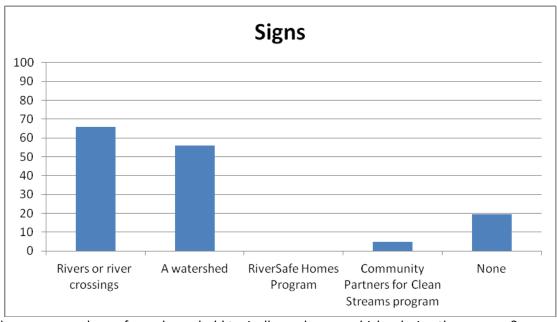
Q10: Which Activities have you or other members of your household participated in or near lakes and streams in this area during the past year? Multiple responses are allowed.

	Fishing	Boating	Canoeing/ kayaking	Bird/nature watching	Picnicking	Biking	Swimming	Hiking/ walking	Other	Don't participate
N	22	21	17	21	18	15	24	28	5	2
%	53.66	51.22	41.46	51.22	43.9	36.59	58.54	68.29	12.2	4.88



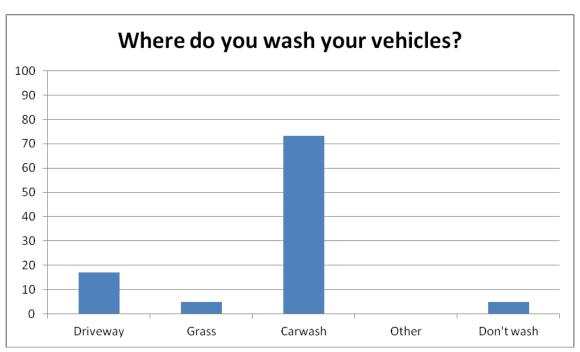
Q11: Which of the following signs have you seen in your community?

			•		
	Rivers or river	A watershed	RiverSafe Homes	Community Partners for Clean	None
	crossings		Program	Streams program	None
N	27	23	0	2	8
%	65.85	56.1	0	4.88	19.51



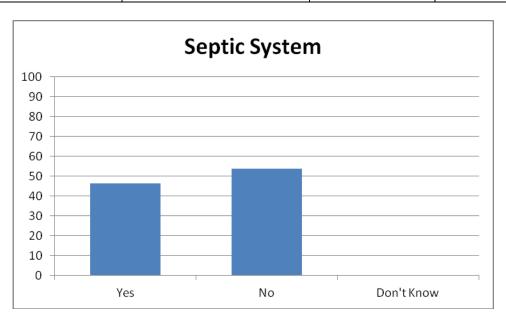
Q12: Where do you or members of your household typically wash your vehicles during the summer?

	,	, , , , , , , , , , , , , , , , , , ,	<u> </u>			
	Driveway	Grass	Carwash	Other	Don't wash	Total
N	7	2	30	0	2	41
%	17.07	4.88	73.17	0	4.88	100



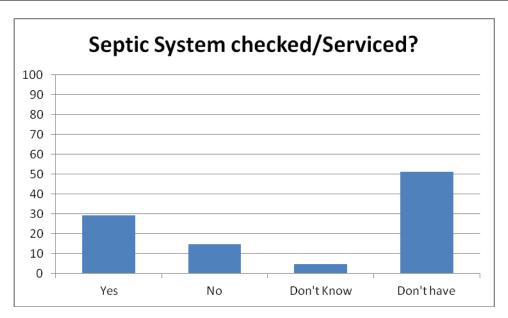
Q13: Do you have a septic system at your home?

	Yes	No	Don't Know	Total
N	19	22	0	41
%	46.34	53.66	0	100



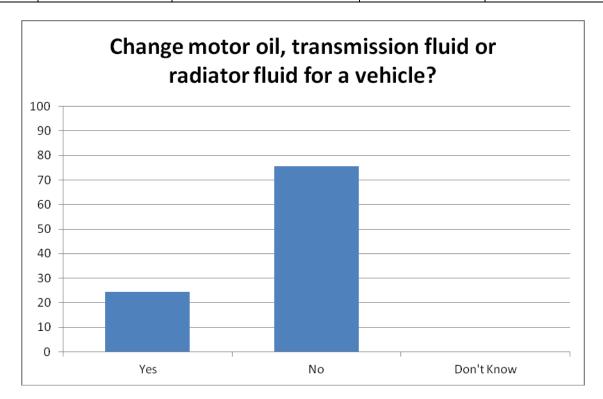
Q14: Have you had your septic system checked or serviced during the past 3-5 years?

	Yes	No	Don't Know	Don't have	Total
N	12	6	2	21	41
%	29.27	14.63	4.88	51.22	100



Q15: Do you or other members of your household usually change motor oil, transmission fluid, or radiator fluid for a vehicle at your home?

	Yes	No	Don't Know	Total
N	10	31	0	41
%	24.39	75.61	0	100



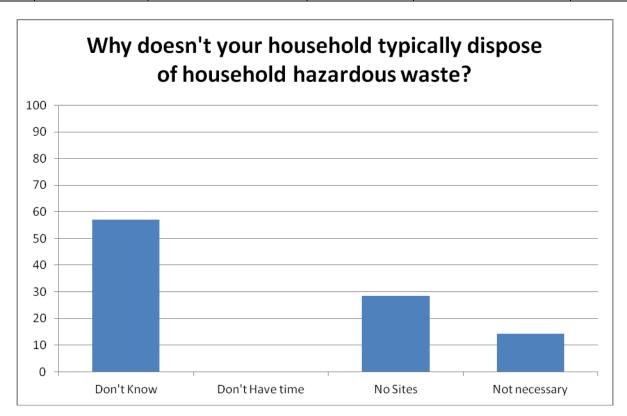
Q16: Where does your household typically dispose of materials, such as old oils or fluids from your vehicle, batteries, pesticides, and other household hazardous wastes?

	Ground	Regular trash	Special curbside collection program	Community collection site	Container	Storm drain/ditch	Other	Don't Know	Total
N	0	2	4	29	2	0	3	1	41
%	0	4.88	9.76	70.73	4.88	0	7.32	2.44	100



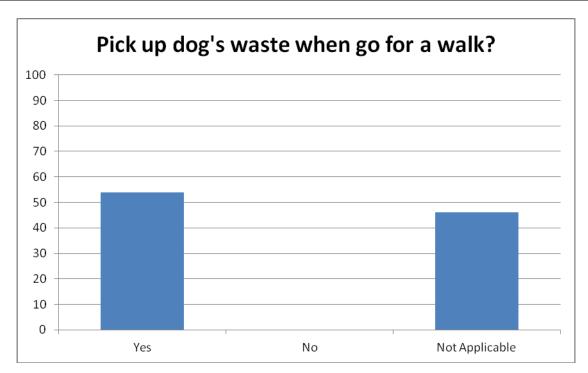
Q17: Why doesn't your household typically dispose of household hazardous waste at a community collection site?

	Don't Know	Don't Have time	No Sites	Not necessary	Total
N	8	0	4	2	14
%	57.14	0	28.57	14.29	100



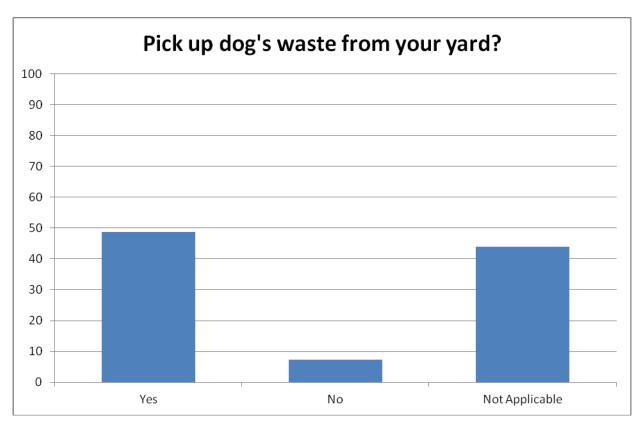
Q18: Do you or other members of your household typically pick up your dog's waste when you go for a walk?

	Yes	No	Not Applicable	Total
N	21	0	18	39
%	53.85	0	46.15	100



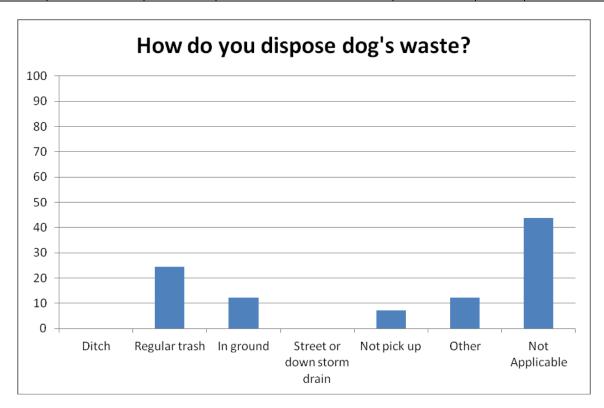
Q19: Do you or other members of your household typically pick up yoru dog's waste from your yard?

	Yes	No	Not Applicable	Total
N	20	3	18	41
%	48.78	7.32	43.9	100



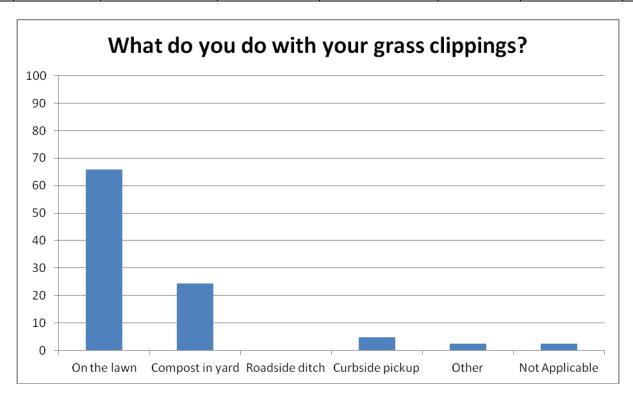
Q20: How does your household typically dispose of your dog's waste?

	Ditch	Regular trash	In ground	Street or down storm drain	Not pick up	Other	Not Applicable	Total
N	0	10	5	0	3	5	18	41
%	0	24.39	12.2	0	7.32	12.2	43.9	100



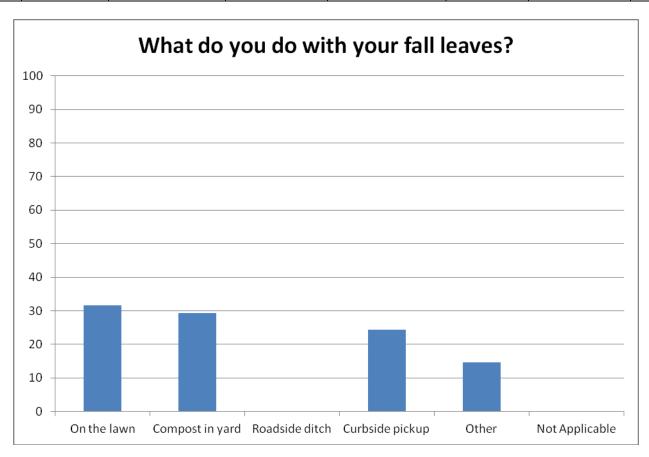
Q21: What does your household typically do with your grass clippings?

	On the lawn	Compost in yard	Roadside ditch	Curbside pickup	Other	Not Applicable	Total
N	27	10	0	2	1	1	41
%	65.85	24.39	0	4.88	2.44	2.44	100



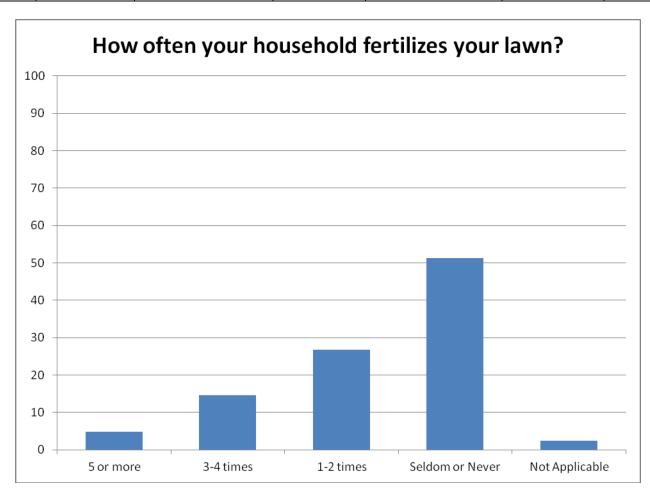
Q22: What does your household typically do with your fall leaves?

	On the lawn	Compost in yard	Roadside ditch	Curbside pickup	Other	Not Applicable	Total
N	13	12	0	10	6	0	41
%	31.71	29.27	0	24.39	14.63	0	100



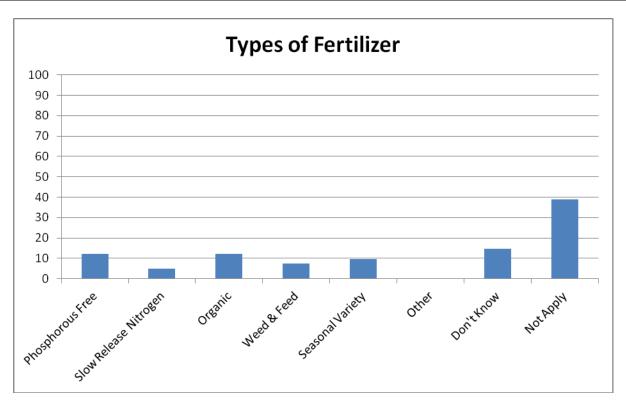
Q23: Which of the following BEST describes how often your household fertilizes your lawn?

	5 or more	3-4 times	1-2 times	Seldom or Never	Not Applicable	Total
N	2	6	11	21	1	41
%	4.88	14.63	26.83	51.22	2.44	100



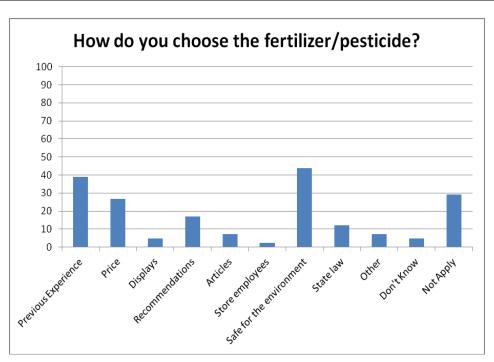
Q24: Which of the following types of fertilizer does your household use?

	Phosphorous Free	Slow Release Nitrogen	Organic	Weed & Feed	Seasonal Variety	Other	Don't Know	Not Apply	Total
N	5	2	5	3	4	0	6	16	41
%	12.2	4.88	12.2	7.32	9.76	0	14.63	39.02	100



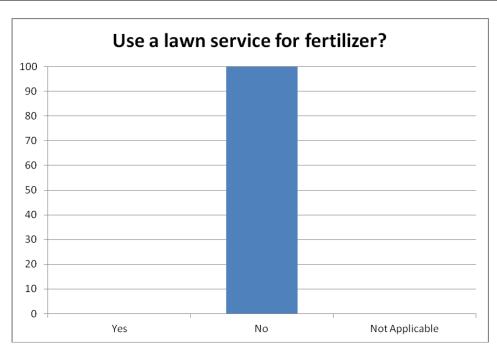
Q25: Which of the following reasons influence the type of fertilizer or pesticide your household uses most?

	Previous	Drico	Displays	Recomme	Articles	Store	Safe for the	State	Other	Don't	Not
	Experience	Price Dis	Displays	ndations	Articles	employees	environment	law	Other	Know	Apply
N	16	11	2	7	3	1	18	5	3	2	12
%	39.02	26.83	4.88	17.07	7.32	2.44	43.9	12.2	7.32	4.88	29.27



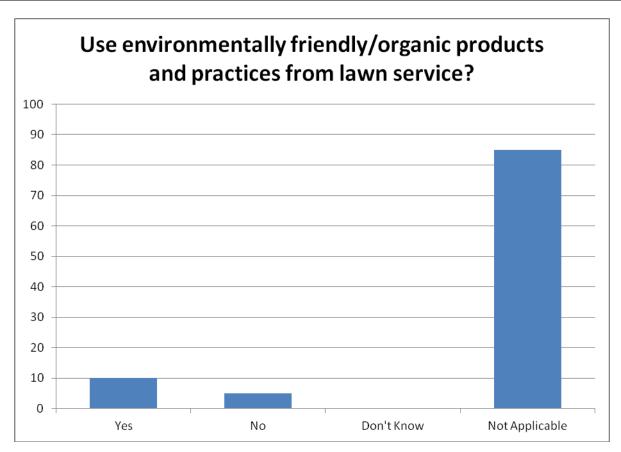
Q26: Does your household use a lawn service for fertilizer and/or pesticide applications?

	Yes	No	Not Applicable	Total
N	0	40	0	40
%	0	100	0	100



Q27: Does your household ask your lawn service to use environmentally friendly/organic products and practices?

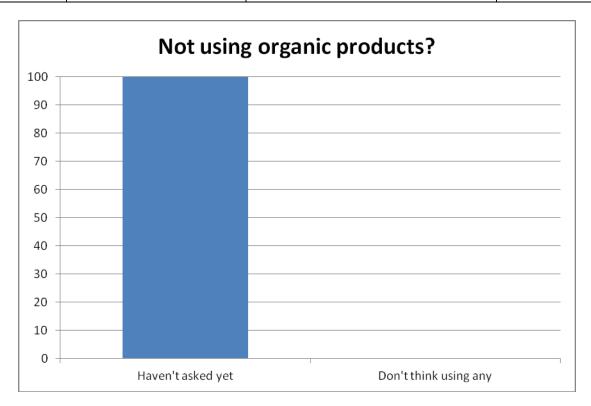
	Yes	No	Don't Know	Not Applicable	Total
N	4	2	0	34	40
%	10	5	0	85	100



	Environmentally friendly products	Don't offer	Total
N	4	0	4
%	100	0	100



	Haven't asked yet	Don't think using any	Total
N	2	0	2
%	100	0	100

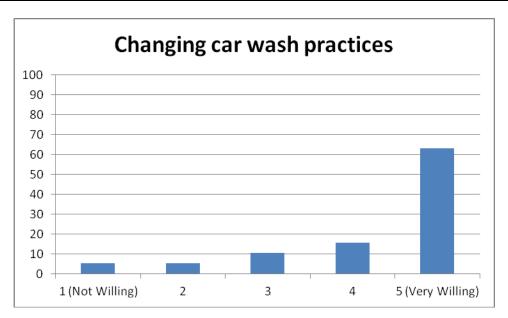


Q28: Several ways that residents can help reduce pollution of streams and lakes in their community are listed below. Changing car wash practices

	Not Applicable	Applicable	Total	
N	5	36	41	
%	12.2	87.8	100	

Already Do this		Not do this	Total
N	17	19	36
%	47.22	52.78	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	1	1	2	3	12	19
%	5.26	5.26	10.53	15.79	63.16	100

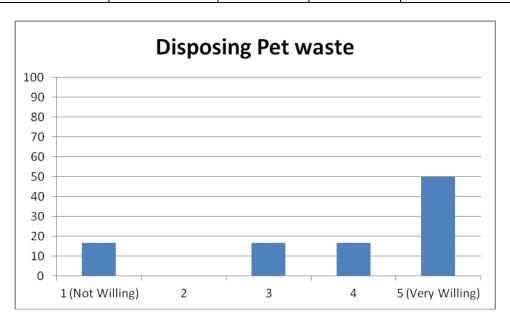


# Promptly picking up and disposing of pet waste

	Not Applicable	Applicable	Total
N	18	23	41
%	43.9	56.1	100

	Already Do this	Not do this	Total
N	17	6	23
%	73.91	26.09	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	1	0	1	1	3	6
%	16.67	0	16.67	16.67	50	100

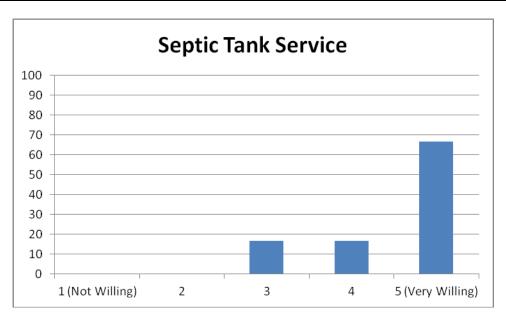


### **Having septic tank serviced**

	Not Applicable	Applicable	Total
N	20	21	41
%	48.78	51.22	100

	Already Do this	Not do this	Total
N	9	12	21
%	42.86	57.14	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	0	0	2	2	8	12
%	0	0	16.67	16.67	66.67	100

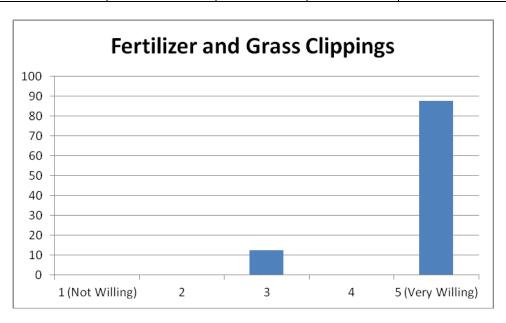


# Sweeping excess fertilizer and grass clippings from pavement onto lawn

	Not Applicable	Applicable	Total
N	15	26	41
%	36.59	63.41	100

	Already Do this	Not do this	Total
N	18	8	26
%	69.23	30.77	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	0	0	1	0	7	8
%	0	0	12.5	0	87.5	100

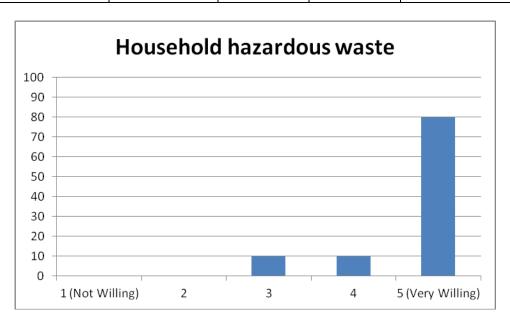


# Disposing of household hazardous waste at a community collection day

	Not Applicable	Applicable	Total
N	3	38	41
%	7.32	92.68	100

	Already Do this	Not do this	Total
N	28	10	38
%	73.68	26.32	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	0	0	1	1	8	10
%	0	0	10	10	80	100



### Landscaping yard with plants native to Michigan

	Not Applicable	Applicable	Total
N	1	39	40
%	2.5	97.5	100

	Already Do this	Not do this	Total
N	16	23	39
%	41.03	58.97	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	0	1	4	3	15	23
%	0	4.35	17.39	13.04	65.22	100

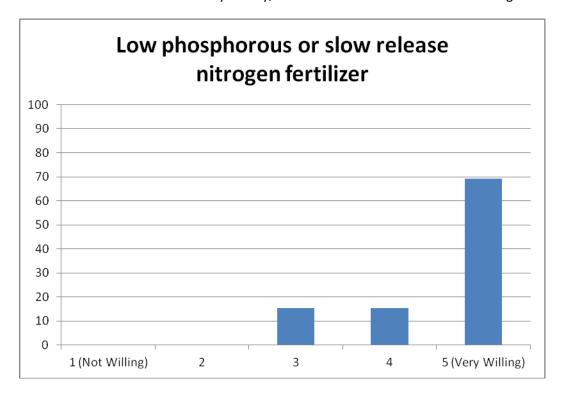


### Using low phosphorous or slow release nitrogen fertilizer on lawn

	Not Applicable	Applicable	Total
N	17	23	40
%	42.5	57.5	100

	Already Do this	Not do this	Total
N	10	13	23
%	43.48	56.52	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	0	0	2	2	9	13
%	0	0	15.38	15.38	69.23	100

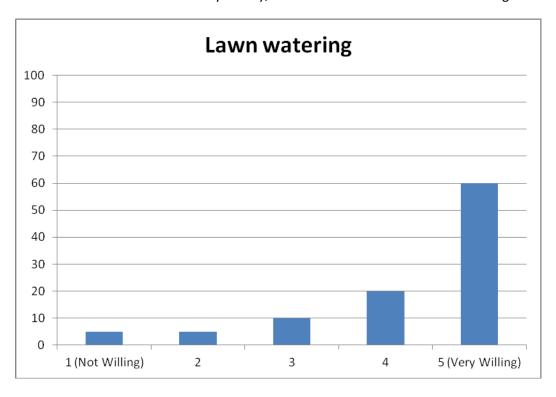


### **Changing your lawn watering practices**

	Not Applicable	Applicable	Total	
N	9	32	41	
%	21.95	78.05	100	

	Already Do this	Not do this	Total
N	12	20	32
%	37.5	62.5	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	1	1	2	4	12	20
%	5	5	10	20	60	100



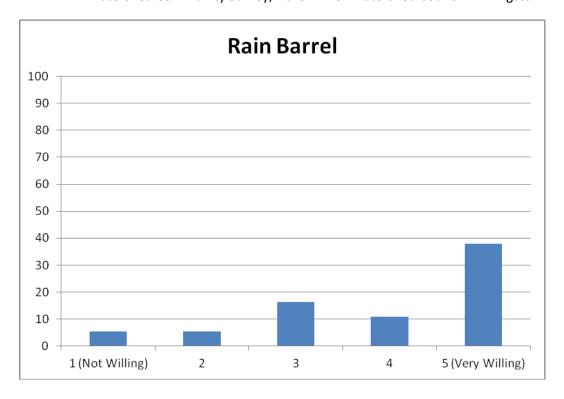
#### **Installing a rain barrel**

	Not Applicable	Applicable	Total	
N	4	37	41	
%	9.76	90.24	100	

	Already Do this	Not do this	Total
N	9	28	37
%	24.32	75.68	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	2	2	6	4	14	37
%	5.41	5.41	16.22	10.81	37.84	100

Watershed Community Survey, Huron River Watershed Council -- Livingston: 41 Respondents



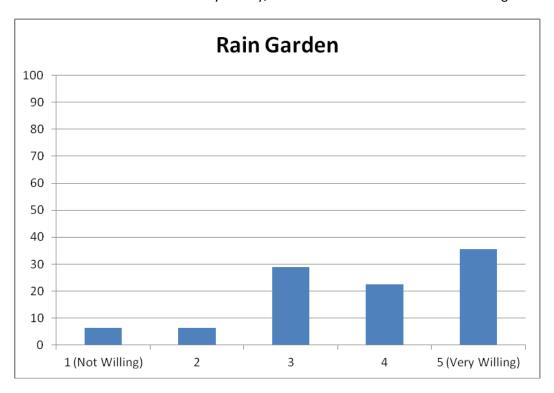
### Putting in a rain garden

	Not Applicable	Applicable	Total
N	4	36	40
%	10	90	100

	Already Do this	Not do this	Total
N	5	31	36
%	13.89	86.11	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	2	2	9	7	11	31
%	6.45	6.45	29.03	22.58	35.48	100

Watershed Community Survey, Huron River Watershed Council -- Livingston: 41 Respondents



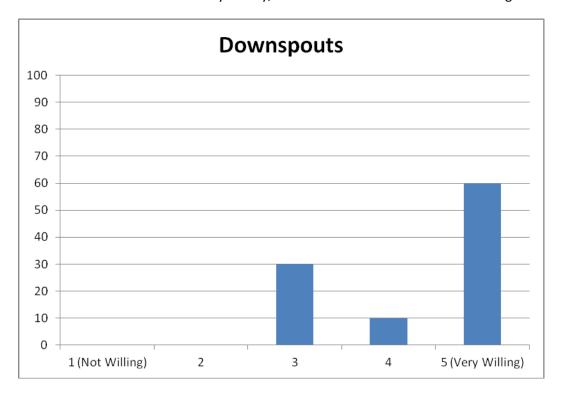
### Directing your downspouts away from paved areas and into your yard

	Not Applicable	Applicable	Total
N	5	36	41
%	12.2	87.8	100

	Already Do this	Not do this	Total
N	26	10	36
%	72.22	27.78	100

	1 (Not Willing)	2	3	4	5 (Very Willing)	Total
N	0	0	3	1	6	10
%	0	0	30	10	60	100

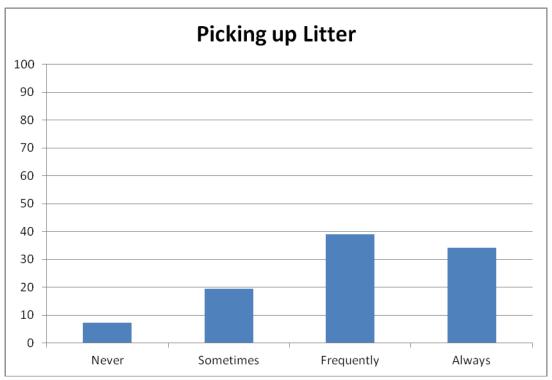
Watershed Community Survey, Huron River Watershed Council -- Livingston: 41 Respondents



Q29: How often do you participate in these activities?

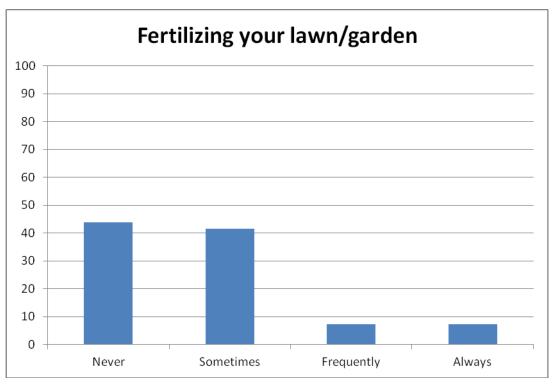
# Picking up litter

	Never	Sometimes	Frequently	Always	Total
N	3	8	16	14	41
%	7.32	19.51	39.02	34.15	100



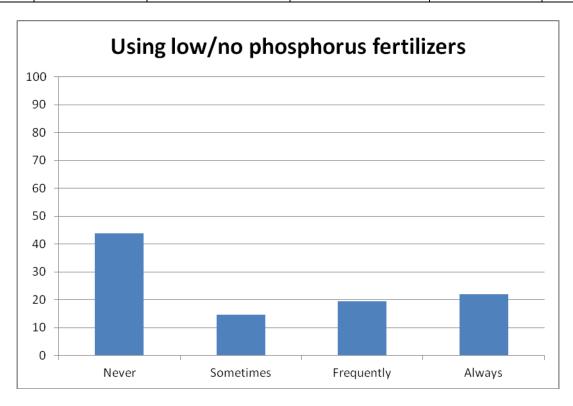
#### Fertilizing your lawn or garden

	Never	Sometimes	Frequently	Always	Total
N	18	17	3	3	41
%	43.9	41.46	7.32	7.32	100



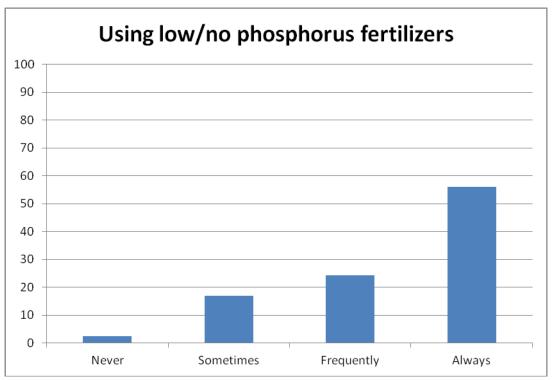
Using low or no phosphorus fertilizers

	Never	Sometimes	Frequently	Always	Total
N	18	6	8	9	41
%	43.9	14.63	19.51	21.95	100



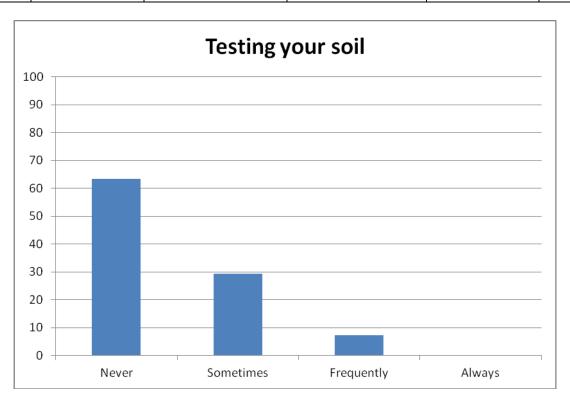
Recycling

	Never	Sometimes	Frequently	Always	Total
N	1	7	10	23	41
%	2.44	17.07	24.39	56.1	100



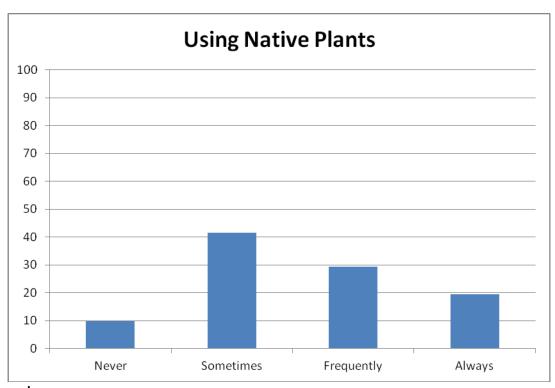
**Testing your soil for nutrients** 

	Never	Sometimes	Frequently	Always	Total
N	26	12	3	0	41
%	63.41	29.27	7.32	0	100



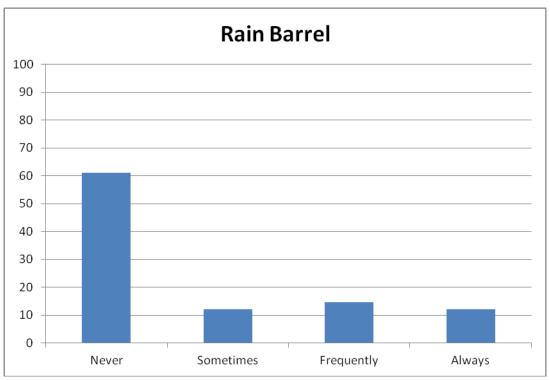
# Using native plants in your landscaping

	Never	Sometimes	Frequently	Always	Total
N	4	17	12	8	41
%	9.76	41.46	29.27	19.51	100



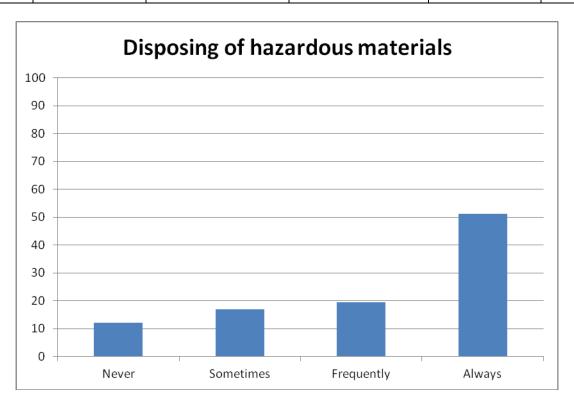
## Using a rain barrel

	Never	Sometimes	Frequently	Always	Total
N	25	5	6	5	41
%	60.98	12.2	14.63	12.2	100



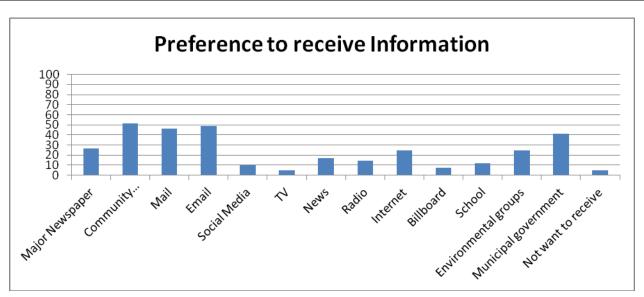
Disposing of hazardous materials at a collection site

	Never	Sometimes	Frequently	Always	Total
N	5	7	8	21	41
%	12.2	17.07	19.51	51.22	100



Q 30: Where would you prefer to receive information about what you can do to protect our lakes and streams?

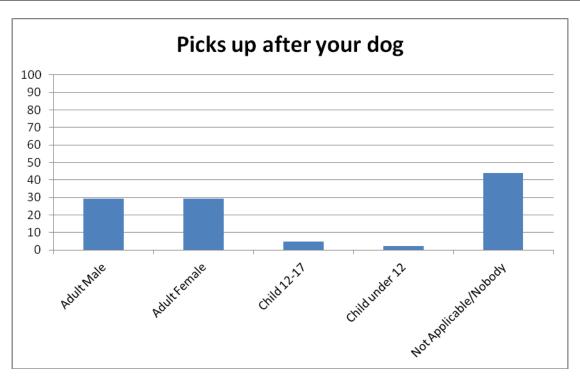
	Major	Community	Mail	Mail   Email	Social Media	T\/	V News Radio	Radio	lio Internet	Billboard	School	Environmental	Municipal	Not want
	Newspaper	Newspaper	IVIAII			IV News	ivews	Nauio		Billboard	3011001	groups	government	to receive
Ν	11	21	19	20	4	2	7	6	10	3	5	10	17	2
%	26.83	51.22	46.34	48.78	9.76	4.88	17.07	14.63	24.39	7.32	12.2	24.39	41.46	4.88



Q31: Which person in your household MOST frequently does the activities listed below?

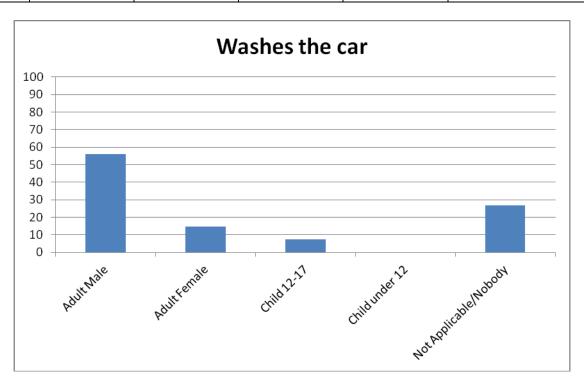
# Picks up after your dog

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
Ν	12	12	2	1	18
%	29.27	29.27	4.88	2.44	43.9



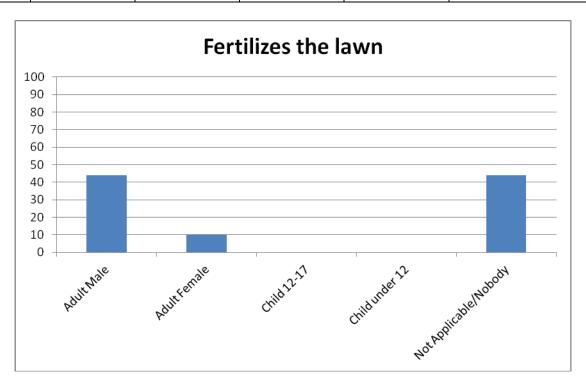
# Washes the car

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	23	6	3	0	11
%	56.1	14.63	7.32	0	26.83



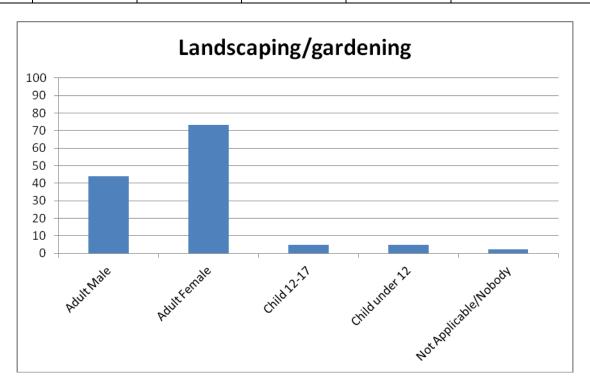
# Fertilizes the lawn

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	18	4	0	0	18
%	43.9	9.76	0	0	43.9



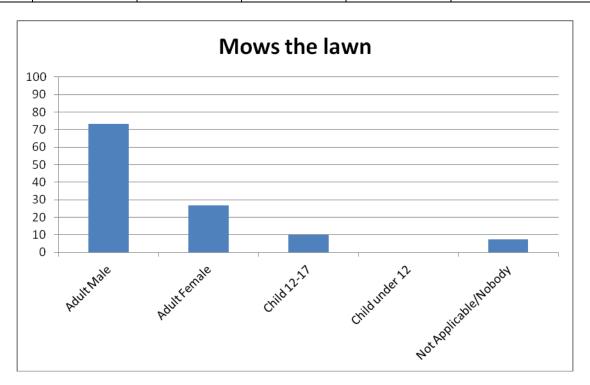
Landscaping/gardening

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	18	30	2	2	1
%	43.9	73.17	4.88	4.88	2.44



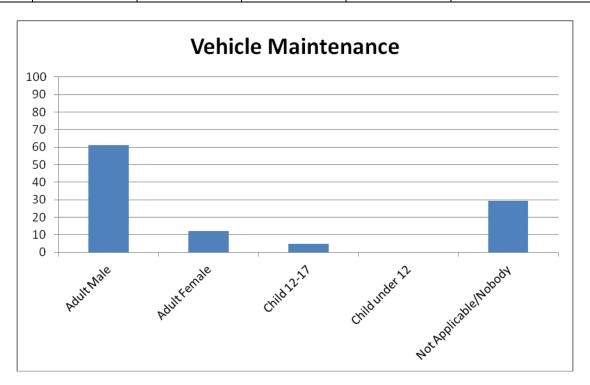
# Mows the lawn

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	30	11	4	0	3
%	73.17	26.83	9.76	0	7.32



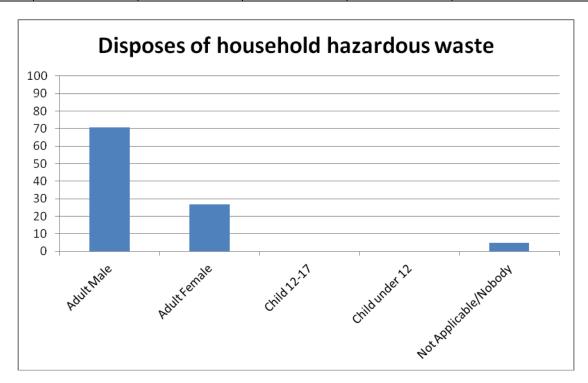
### **Vehicle Maintenance**

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	25	5	2	0	12
%	60.98	12.2	4.88	0	29.27



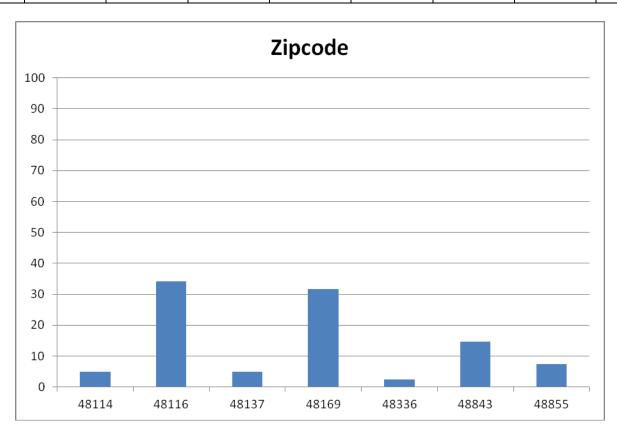
**Disposes of household hazardous waste** 

	Adult Male	Adult Female	Child 12-17	Child under 12	Not Applicable/Nobody
N	29	11	0	0	2
%	70.73	26.83	0	0	4.88



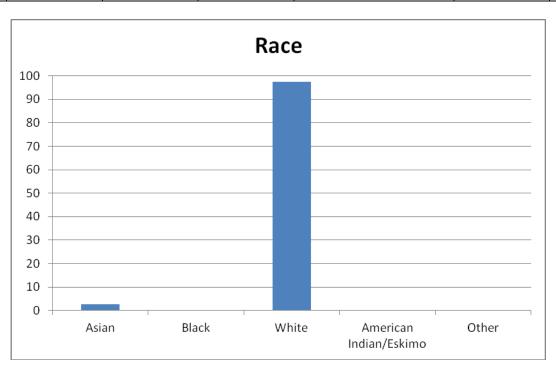
Q33: What is your ZIP code?

	48114	48116	48137	48169	48336	48843	48855	Total
N	2	14	2	13	1	6	3	41
%	4.88	34.15	4.88	31.71	2.44	14.63	7.32	100



Q34: Which of the following best describes your race/ethnicity (check all that apply)?

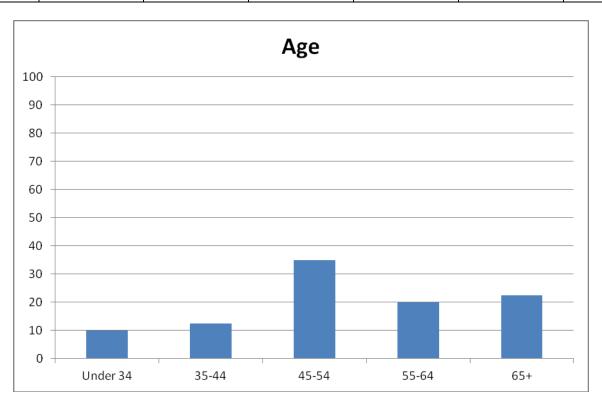
	Asian	Black	White	American Indian/Eskimo	Other	Total
N	1	0	39	0	0	40
%	2.5	0	97.5	0	0	100



Watershed Community Survey, Huron River Watershed Council -- Livingston: 41 Respondents

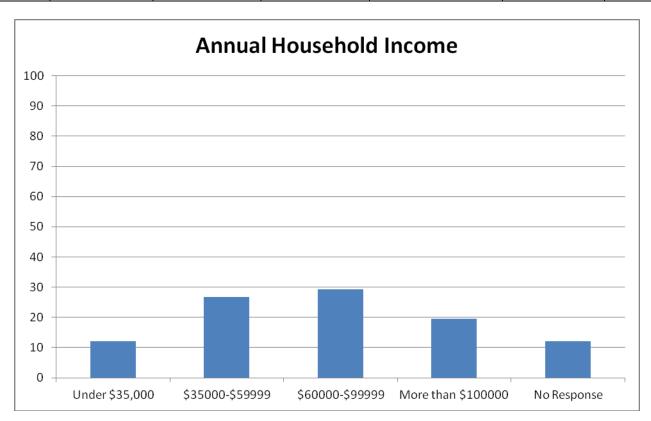
Q35: What is your age?

	Under 34	35-44	45-54	55-64	65+	Total
N	4	5	14	8	9	40
%	10	12.5	35	20	22.5	100



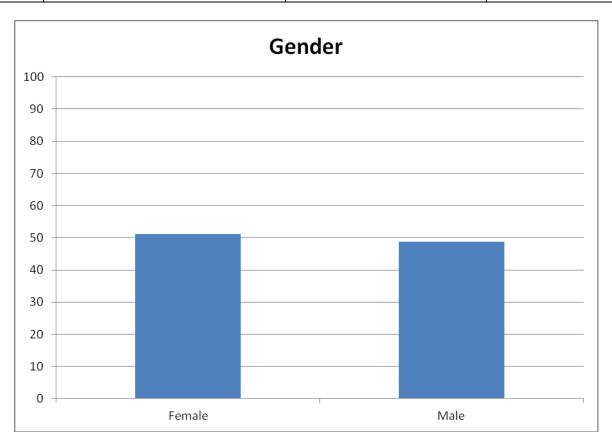
Q36: Would you say your annual household income is?

	Under \$35,000	\$35000-\$59999	\$60000-\$99999	More than \$100000	No Response	Total
N	5	11	12	8	5	41
%	12.2	26.83	29.27	19.51	12.2	100



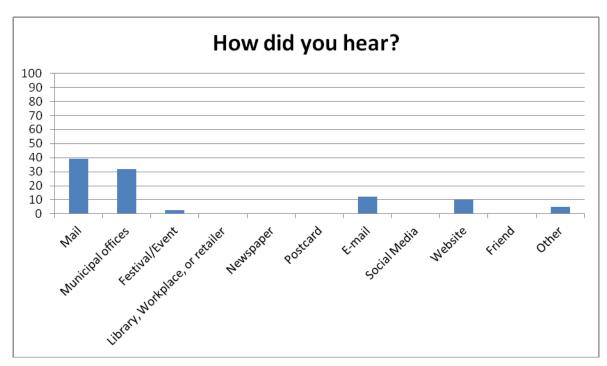
Q37: Gender

	Female	Male	Total	
N	21	20	41	
%	51.22	48.78	100	



Q38: How did you hear about this survey?

	Mail	Municipal offices	Festival/Event	Library, Workplace, or retailer	Newspaper	Postcard	E-mail	Social Media	Website	Friend	Other	Total
N	16	13	1	0	0	0	5	0	4	0	2	41
%	39.02	31.71	2.44	0	0	0	12.2	0	9.76	0	4.88	100



- Unused or outdated medications are no longer disposed in the toilet.
- No use of lawn fertilizers or weed killers. Removing trash from lake. Use only non-motorized watercraft.
- install rain barrel, eliminate use of chemicals on lawn and in home
- Installed rain barrels. This year we will install a pervious concrete driveway.
- Recycling. No use of fertilizers.
- reduced water use, installed low flow shower heads, used environmentally friendly fertilizers
- avoiding pesticides not using fertilizer on the lawn.
- composting and cleaning up dog manure so it does not drain into the water table
- Cleanup projects through my son's Cub Scouts group.
- No pesticides, herbicides, or non-organic chemicals in yard or house; installed rain barrels; use native plantings.
- Using eco friendly cleaning and gardening products, maintaining buffer zone near lake.
- removed concrete walkways replaced with pervious material
- using environmentally safe and bio-degradeable lawn care stuff
- Added native plant garden, taken chemicals to household hazrdous waste facility, not used lawn chemicals, installed rain sensor, picked up after pets.
- reduced water usage
- do not use any lawn fertilizer, one in our household attends Ypsilanti Township Water Conservation Advisory Commission on a regular basis
- No-P fertilizer for garden, scheduled watering
- Less toilet flushing; don't bury dog waste (dispose in trash); shorter showers, pour volumes of cleaning or cooking water on the ground/dirt -- not in septic.
- used natural fertilizer for lawns and installed water-preserving shower heads. Use rainwater to water outdoor plants as well.
- Careful use of water at home.
- All of the water run off is distributed back on to our yard, or collected.
- Reduced fertilizer usage, continue to recycle and participate in HHW events
- cistern
- -don't use salt in winter
- don,t use salt in softner
- Help clean by the Huron river.
- Allowed grass to grow taller.
- Clean up water's edge and allow a vegatative buffer to develope. Not using lawn fertilzer.
- try to use less water
- using more septic tank friendly products
- I am assuming that taking the oil from changing the oil in cars to the proper oil disposal stations rather than dumping it on the ground counts.
- protecting ground water no fertilizers on lawn and expert application of herbicides. Septic system checked.
- Catch rain water to water my plants and gardens. Keep a pitcher of cold water in the refrigerator so we aren't apt to let the cold water run before filling a glass of drinking water.
- Water lawn less, gotten rain barrel, donate to HRWC

- Keep leaves away from drainage area
- Installed a rain barrel
- recycle conserve water
- My family members and I have volunteered at Argo pond helping to remove invasive plant species and improve access to the pond. As an active rowing family we've been involved with the fight to save Argo pond, and preserve it's status as a valuable recreational water resource.
- We've limited use of fertilizers and other lawn chemicals, such as herbicides.
- We have tried very hard to avoid using bottled water, because of the waste it causes.
- limited fertilizer and selected cleaners that are less harmful
- no fertilozer on lawn.
- installed rain barrels
- no fertilizers
- rain barrel
- We are creating a water garden in our yard.
- stopped using pesticides and quick release fertilizers on my lawn and garden.
- We dont fertilize our lawn
- stopped applying "weed & feed" to lawn, installed rain barrels at downspouts for later garden watering
- Landscape to soak up rain water.
- no phosphate, organic fertilizers
- No watering, no pesticides
- Reduced the amount of water used.
- Less fertilizer on lawn, cleanups on Huron River banks
- keep leaves out of drains
- Huron River cleanup. Reduction in fertilizing.
- We've paid better attention to what we feed our lawn with. We're mulching much more.
- Don't use fertilizer or weed killer on grass. Test garden soil and only amend if needed. Keep leaves out of street. Don't leave water running excessively. Minimize watering garden.
- cleaning storm drains, raking leaves out of the street, NOT fertilizing or putting herbicide on the lawn, growing the grass longer
- volunteered with HRWC river roundups, stonefly surveys
- We have a chemical free yard. We use our rain barrow water for watering.
- conservation and awareness of phosphorus levels
- cut back on washing cars reduce number of fertilizer applications to lawn don't run dishwasher until it's full
- Using biodegradable cleaning products, not using chemicals in our garden, teaching my daughter about keeping the earth clean!
- reduce consumption, use phosphorus-free fertilizer
- conservation
- more aware of proper waste disposal
- Replaced septic field
- lowered watering, cut lawn higher, fertilize less often

- Dont use lawn chemicals, ban on car washing, educated community
- phospherous free fertilizer. Less watering of lawn. Kids shut off water while brushing teeth.
- Reduced the fertilizing
- We swept and gathered our leaves to keep them out of the sewers this fall
- better gutters and diversion of storm water from city sewers
- Do not dump harmful waists such as oil
- Started washing clothes with cold water, turn faucets off instead of letting them run.
- Use only organic materials on the lawn.
- Pulling garlic mustard and spotted knapweed, killing autumn olive and buckthorn, general cleanup of litter.
- More mulch, water gardens in evening, plan on purchasing a rain barrell this year.
- using nitrogen only fertilizer on lawn
- use green cleaners, use rain barrel, aware of water use, volunteer at Steiner High School to assist in teaching about water quality
- Did not use fertilizer
- Fertilizer choice, nontoxic cleaning products
- DNR Frog & Toad Survery, Neighborhood garbage clean up day and tree planting. Worked with township regarding a builder dumping debri in stream, founded Organic vegi garden at school.
   Speak to young children about our environment. Professional arborist, specializing in getting properties/trees off of chemicals & going organic.
- changed fertilizers
- rain barrel
- we have not used fertilizer on our lawn.
- Less lawn chemicals. Spread the word around with everyone I can that the sewers run into our rivers so please don't put oil and junk down there.
- conserving water, planting trees, began working with the HRWSC
- I catch a large percent of rain that would otherwise fall on my driveway and roll down to a storm sewer.
- less fertilizer
- native plants, no lawn, rain barrels, removal of invasives, donations to HRWC, conservation of water used in home
- organic fertilizer on lawn and added native plants along waterway
- eliminate lawn fertilizers
- contribution to hrwc
- Don't use garbage disposal any more
- volunteer for HWC
- 1. practce home water conservation (toilets, showers, sprinkling). 2. more conscientious about use of fertilizers, herbicides, pesticides.
- bought low water usage washer (we have a well) and hired environmentally sensitive lawn service to address needs
- switched from NaCl to KCl for my water softener and being sure to use natural fertilizers and less pesticides.
- No fertilizer or herbicide use, and some rainwater harvesting!

- Reduced water consumption. Use greener cleaner supplies rather than harsher chemicals.
- LF shower heads
- using detergents with no phosphorus, washing car over the grass.
- low flush toilettes
- built a rain barrel to catch drain run-off and conserve water
- use less water, compost.
- Do not wash car at home. Reduction in use of fertilizer and controlling the amount of watering of the lawn.by using manual contol.
- ensure hazwaste is properly disposed of rather then dumping in the trash
- Purchased and started using a rainbarrel to limit surface water runoff.
- rain barre
- raised mower hight, mulch, low P fert., HRWC volunteer
- Erosion control
- Choose organic pest management practices when practical, became active with HRWC and their programs
- Called the Washtenaw Soil Erosion Control and the DEQ to report two instances of gross construction-caused erosion into waterways.
- vigilance with dog poop
- Changed lawn fertilizers
- no major weed killers even though we have a zillion dandelions
- Disposed of toxics and paint in proper ways.
- I have noticed the signs around town which are painted near curb drains which remind us that water drains to community water.
- I use natural products to keep bug population down, mow with a reel mower, mulch, recycle my water outside (use water from downspouts to water no edible plants).
- We have rainbarrels; don't use fertilizer, etc.
- Switched to organic yard fertilizers. Stopped raking leaves/yard waste into sewers.
- use organic fertilizer 2 times / year
- Put a rain garden in the backyard to reduce rain water runoff
- we do not use chemicals in our yard excepting on poison ivy that gets beyond the pulling and removal stage, we also do not use pesticides for insects
- no lawn fertilizer, we mulch grass, use rainwater for garden, use rain garden, use native plants.
- We try to conserve water usage, by not watering our lawn or garden and conservative usage inside the home as well
- We are more careful with products that might wash down the storm drains and chose more environmentally consious products.
- rain barrel, growing only native plants in garden and not watering, etc
- Hooked up a water barrel to one of the gutter downspouts. I'm using this to water plants instead of tap water. I suppose it decreases runoff into storm drains, too.
- Proper disposal of unused prescription drugs
- Continue to use a rain barrel
- Stopped watering lawn, adding more native plants instead of grass
- Rake leaves out of the street to keep them out of storm drains. Installed low flow toilets (reduce

Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

water demand). No fertilizing.

- No more chemical fertilizers.
- Reduced, reused and recycled in every way that we can. Mulching.composting leaves & fruit/vegetable matter, refrained from using pesticides/herbicides (except for spraying poison ivy)
- mulch leaves so they don't clog street gutters
- Installed cisterns, installed another rain garden, installed permeable pavers, and made a retention area in my back yard- I have zero rainwater runoff into the watershed now.
- reduced pavement, mulched leaves, no fertilizer
- rain barrel
- USED ORGANIC FERTILIZERS AND ORGANIC PLANT FOOD IN GARDENS. STOPPED FERTILIZING LAWN
- To be careful of what we put in the drains
- not fertilize yard, planting more native plants to use less water.
- We no longer flush drugs down the toilet or dump drugs down the drain. We use less water overall.
- limit shower time, turn off tap for toothbrushing and dishwashing, watering car on lawn
- Additional rain barrel. Redirected gutter run-off into gardan beds.
- Changed what products are used on the lawn
- We don't use any chemicals on our yard, employ our rain barrel for any needed plant-watering, recycle diligently, bring our own bags when shopping and use only eco-friendly cleaning products except the occasional use of bleach.
- started a rain garden in back yard, and use a rain barrel
- Rain barrels. No herbicides or pesticides.
- mulching
- Using less chemicals on the lawn.
- Rain barrel usage, no fertilizers, mulching mowing, minimal watering.
- We don't use very few toxic chemicals on our property and none on our lawn. We have planted more native plants and shrubs.
- new water efficient toilet Reduced use of dishwasher to 2 x a week use less fertilizer and pesticides on lawn.garden
- Used a rain barrel and never wash car in driveway. Never fertilize lawn and do not use chemicals.
- Eliminated the use of fertilizers and converted to use of native plants.
- I now have rain barrels set up at my house and have planted a rain garden.
- We used to fertilize our yard when living in a subdivision but after recently moving to lake front property, we no longer put any kind of fertilizer on the grass.
- Quit washing the car at home.
- Installed rain barrel.
- Contributed to Environment Michigan's water fund.
- Low phosphorus fertilizers
- We don't water lawn or wash car, do not use fertilizers, do not dump anything in storm sewers.
- We installed a rain barrel.

- Removed debris from catch basins.
- Planted a new tree and a rose bush.
- installed rain barrells and a compost pile to improve drainage from our lawn
- Nothing NEW, but we try to conserve water at-home and not use yard or househeld chemicals.
- I already have a rain garden as well as low-flow aerators on my faucets and showers. I am an
  organic gardener so I don't use anything nasty on my property than can work its way into the
  water system.
- Reduced chemical use at home; erosion fencing for construction; left wider unmowed patch around pond
- using 100% biodegradable, non-phosphate cleaners in our home
- Donate ot Clean Water Action Reduced watering and fertilization More care with the disposal of pills, paints; potential toxins.
- not used fertilizer, pesticides, etc on lawn or garden.
- Use rainbarrels to decrease runoff; minimized use of fertilizers and insecticides.
- signed up as a water safe home. continued to not use lawn chemicals, walk or bike to work to reduce pollution.
- Cut back on lawn treatment.
- Stop[ped using all chemicals on my lawn.
- installed rain barrel. began using phosphorous-free fertilizer. reduced amount of impervious surface when driveway was rebuilt/repaved.
- no phosphorous on lawn
- Added a rain barrel and stopped using fertilizer.
- changed fertilizer
- We don't use fertilizers.
- Live on a lake, and am very careful when refueling boats, use no soap or shampoo in or near the water, and don't spray any fertilizers or weedkillers on my lawn.
- water barrels maintain a system where roof run-off is directed away from hard surfaces to a place where it can percolate into the ground
- Stopped using fertilizer with phosphorus. Cleared debris from gutters after rain. Installed 10 water barrels.
- Water rsin barrel, conserve water usage
- Don't use any fertilizer or pesticides on lawn or plants. Don't empty auto antifreeze, etc. on ground or in street drains.
- stopped having lawn fertilized
- the church put up rain barrels and I helped to promote them.
- Rain barrels; taking classes about native plants and changing my garden to natives; stopped using lawn fertilizer, pesticides.
- Using more Eco friendly lawn products
- Rain Barrell, Rain Garden, wash car on lawn, pick up dog waste in yard, do not use pesticides or fertilizers, etc.
- Protect water from runoff
- rain barrels less water used in the home and yard
- properly disposing of household chemicals, animal waste in garbage

- We have replaced our lawn with woodchips and plantings which makes the use of fertilizers and lawn care chemical products no longer necessary. We have also taken the time to rearrange water spouts to point away from the sidewalk and driveway and move into the yard.
- reduce use on lawns. New washing machine and dishwasher with low water use.
- No more lawn fertilizing, car washing, expand perrenial garden in place of lawn.
- Reduction in use; alternatives to using city water for lawn; others
- eco safe/better lawn fertilizer
- Native landscaping along waterway in yard
- no more fertilizing, have been trying to get rid of grass and plant native plants.
- installed rain barrel
- We've been very careful about disposing of toxics responibly.
- reduced lawn watering
- water barrel
- reduced the frequency of fertilizer applications
- Low phosphate detergents, wearing some clothes (shirts and pants) a second or third time before before laundering, no fertilizers on the lawn, using leftover vegetable steaming water (pot licker) to water plants,
- Become a "river-safe" household.
- Use of non-P ferdilizer. Resysle my leaves on my own lot. Keep the street curb free on debris. I have 4 rain barrels installed and I use the collected water,
- Discontinued using phosphate fertilizers. Rain Barrels. Water permeable paving on patio
- stopped watering my lawn
- Refrained from lawn chemical use Reduced household water use
- rain gardens, placement of gardens, keeping the two drains I have clean, never utilize chemicals for the yard
- composting so we use less water putting food scraps down the disposal
- Rain barrels
- disconnect storm drains from sanitary sewer
- no use of poisonous, dangerous plant foods, etc
- No \*new\* actions in the last 2 years, but continuing actions like collecting rainwater in rainbarrels to water plants, avoiding use of fertilizer (phospates or otherwise), properly recycling CFLs, batteries, etc.
- We are conscious not to use any so-called anti-septic cleansers, personal care items, etc., that
  would contaminate the water with chemicals the AA water treatment system cannot remove.
  We understand these and pharmaceutical residues from an overly medicated populace are
  rapidly contaminating water supplies.
- Not watering lawn as much. Using less water in general. Using phousphate free fertilizer
- No phosphate fertilizers, no car washing in driveway, human powered push lawn mower, vegetable garden added.
- Changed type of fertilizer used
- no longer wash my car in my driveway, try to conserve water
- No chemicals on lawn, mulch, compost
- Quit fertilizing; planted clovers in lawn.

- Obtained and installed rain barrel; won't use pesticides, never water lawn.
- Installed rain barrels, don't flush as much, don't use water to clean off driveway
- we use less fertilizer in the yard and more green products when cleaning in our home.
- No spray yard. No fertilizers.
- changed type of fertilizer, compost a greater amount of yard stuff, try to control invasive species around Thurston pond
- Got rid of my lawn...no more use of water, chemicals, lawn mower...
- Installed rain barrels.
- installed water saving devices in home
- stop using grass fertilizer
- re direct down spout
- discontinued fertilizing
- installed rain barrel, put in native plants, bought new windows and shades for insulation, purchased water sense appliances
- Directed gutter run off to garden.
- used mulch in gardens to cut down on watering
- installed rain barrels, no lawn fertilizer
- I make sure I double bag all dog poop and dispose of in trash. I don't wash my car in the driveway any more, I only take it to the car wash. I replaced lawn with ground cover that doesn't require watering.
- Lableing storm drains
- Native planting, recycling, organic lawn and landscape care,
- picking up dog waste
- hardly ever water grass
- Installed rain barrel and kept storm drains free of debris and leaves.
- stopped using lawn fertilizer that is not good for the environment
- Don't use fertilizers on lawn.
- Enhanced downslope drainage from around the foundation of the house into the surrounding woods
- Added rain barrels to reduce stormeatet runoff and planted two raised beds for organic veggies
- 400 gal water collection and distribution system. Several containers. May not be enough to collect all the water from the roof, bu close.
- Done long before--rainwater gardens, rain barrels, proper construction of driveway.
- Less fertilizer, mulch in leaves, careful about number of toilet flushes, work for and support HRWC
- rain barrels > 10 years; rain garden 5 years; deck instead of hardscaping; no lawn chemicals; compost; minimal household chemicals
- Installed rain barrels. Stopped watering the lawn with city water.
- Use of more environmentally friendly products (e.g., more old-fashioned methods for unclogging drains than use of Drano)
- installed rain barrels (we now have 4!) watersafe home
- Used mulch instead of fertilizer on lawn. Installed a rain barrel
- rain barrels

- Started saving rainwater in buckets for plant watering. Also plan to look into getting a rain barrel.
- Use much less fertilizer and other chemicals on the lawn.
- I do not fertilize my lawn nor do I use salt in the winter.
- Stopped neighborhood from hiring company to spray on medians where we live; set up 4 rain barrels and use water for yard watering; converted front yard from grass lawn into a mixed use garden; planted butterfly garden at local elementary school; planted trees at local elementary school; set up fence to protect grassy area on elementary school property, part of a savanna; will soon install signs encouraging people to pick up dog waste around local small nature area
- I've lived in my house for 4 months and rent. I'm not sure what has been done. Sorry!
- washing cars on the grass
- Try to reduce water consumption by only running the dishwasher when it's full (~1X/wk) & only doing full loads of clothes washing.
- rain barrels, no phosphate in fertilizer, general conservation
- Added 35 gallon rain barrels to the gutter downspouts (use water for landscaping, garden and potted plants)
- Have become a riversafe home and staying aware of what I put on my lawn affects our water and how much water I use in my home or around my home affects our water sources. Want to invest in a rain barrell
- install rain barrels
- Rain barrels, re direction of roof storm water to gardens
- Lawn freak. Have changed from "i-don't-care" attitude i.e., buying fertlizier for new lawns, to phos-free fertilizer.
- Rain gardens.
- We don't use a lawn service for weeds
- canceled lawn treatment service
- limit the amount of fertilizer. Changed fertilizer type/brand
- Pick up dog waste and dispose of in plastic bags in garbage.
- Rain barrels No herbicides or pesticides Raked out storm drain
- eliminating my front lawn by installing a native plant garden. Planning to install rain harvesting, eventually to clean it up to potable levels. I've also done extensive outreach and education in my community and have petitioned my local township board to utilize greater setbacks, to investigate the possibility of pervious pavement for a planned safety path, among others.
- Did not put pesticide or fertilizer on lawn.
- We are careful when spraying for weeds or insects. We recycle oil and gas products.
- volunteer with HRWC, provide info to others on run off, complained about construction that didn't protect storm drains, written about the issue
- We don't use chemicals on our yard and we buy vegetables from local organic sources.
- Switch water softeners
- We're limiting the use of fertilizer on our lawn, and we've added native plants in parts of the yard.
- stopped using lawn fertilizers, participated with Global relief (trees in neighborhood) dispose of chemicals properly (not in drains or street) etc.
- Reduce water usage with low flow fixtures, mow high, wash car on lawn--not on street. Cut

Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

back on fertilizers.

- we started using natural products to reduce runoff of chemicals into the water systems
- stopped fertilizing lakeside
- We use a mulching lawnmower and we have minimized our use of lawn weed killers
- biodegradable products only
- conserve household water, plant native wildflowers
- Turn off the water when we brush our teeth, only wash a full load of clothes, stopped watering the lawn and wash car at the car wash, not at home
- natural shoreline native planting
- We drink less bottled water
- Active composting and also finding effective ways to deal with cooking oil!
- no chemicals or fertilizers on our lawn, minimal to no extra watering of lawn during the summer, purchased water barrel for high rain days/gutter overflow
- support non-phosphorous products when possible; use pond water-approved chemicals for invasives & weed control along/near our community ponds.
- conservation of water usage; avoiding lawn chemicals
- never use fertilizers, wash car on grass, take used motor oil to recycle center, etc
- try to minimize lawn watering
- I don't water my lawn
- rain barrel, careful about what goes into drains, remove leaves & twigs from street drain
- Discontinued/drastically reduced use of lawn fertilizers/weed killers
- Rain barrel and stopped using fertilizer on lawn
- grass planted, rain barrel in use, planning rain garden
- rarely mow my lawn--letting most of it stay natural; no hard surfaces on driveways; placed my farm into a conservation easement.
- Using Phosphorous free fertilizer.
- More eco friendly fertilizer.
- 1. We are in the process of building a second rain garden. 2. I help out with bug collections and ID.
- set up 4 rain barrels
- no more lawn treatments and we try to use all natural cleaning agents or environmental friendly products
- Always pick up after our dog and switch to organic fertilizers for our yard
- Get leaves/debris out of the street gutter before it goes down the drain
- disposed of paint properly (not down drain)
- Installed additional rain barrels to avoid using drinking water to water gardens.
- spread my opinion that the Barton Dam needs to go!
- drink tap water
- I think that by keeping leaves out of the storm drain I am taking action to protect local water resources
- raked leaves, washed car only at car wash, disposed of cleaners through trash.
- phosphorus free fertilzer, keep grass clippings from sewer system,
- fixed plumbing

- rain barrels, maintain no fertilizer, pesticides, etc. Use less water.
- installed a rain barrel, cleared storm water drain of leaf buildup, use only organic lawn fertilizer and little of that
- didn't flush old medicines in toilet. turned them in at a pharmacy instead.
- put rolled up plastic hoses over some drainpipes
- reduced flushing toilets
- take any toxins or left-over fluids to the toxic collection site
- Don't use pesticides, don't flush household drugs or chemicals down the drain. Don't fertilize lawn with phosphates, use biodegradeable detergents in dishwashing and laundry.
- Stopped lawn treatments
- We planted more trees like river birch and Dawn redwood that take up a lot of water. Lost a
  maple that was absorbing a lot though. Put in a 5 foot deep coiled rainwater catchment system
  in our front yard. You would never even know its there. I have a lot of shrubs such as redtwig
  dogwood ground cover etc. that take up the water and prevent runoff.
- Stopped lawn service and use of fertilizers....hand weed and reduced/almost eliminated watering of lawn
- no fertilizer, no car washing
- restrict fertilizers don't use excess water4 be careful of runoff
- drained one downspout to low level garden area
- We have used compost to fertilize the lawn.
- Use no pesticides or herbicides on lawn and garden. Keep area around street drains free of refuse/leaves/debris.
- Making sure there is no phosphate in our fertilizer, cleaning up leaves from the street within a reasonable amount of time.
- We use less water in the house (don't let faucets run, and use very little water when showering, etc.). We also make sure that leaves & other stuff is cleared from street drains so it won't fall into the sewers.
- Worked with U-M as student
- We have a rain barrel. Our neighbor installed a rain garden. We are very careful not to dump waste in the street or yard
- general i.e. use less water-mulch leaves-use ecofriendly products-etc
- rain barrels, mowing blades higher, no fertilizers or weed killer.
- not wasting or reusing tap water
- Added rain barrel.
- Worked with HRWC, used less water, installed low flow toilet, composted more and put less in the disposer.
- We installed a rain barrel, but have been frustrated with it (the spigot clogs all the time, and
  even when its open it only lets a small stream of water through at at time). I have been a
  member of Clean Water Action and have contacted my representatives when they gave me
  information.
- rain barrel
- We keep our leaves out of the street so they don't enter the sewers
- Created a rain garden.
- signed anti-fracking petition stopped watering lawn

Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

- Used less water.
- stopped using fertilizers, protected against runoff, installed a rain barrel, planted natural species of vegetation.
- Rain garden
- we don't add fertilizers to our lawn, we don't wash our car in our driveway, stopped using harsh cleaners in our home.
- Very limited use of lawn chemicals.
- use less fert.
- decrease water usage use biodegradable detergents
- Changed fertilizer
- No fertilizers, pesticides, composting
- Used less phosphate feretilizer.
- We bag our leaves no more sweeping into the streets.
- Clean the leaves out of the street 'gutters' that lead to the river. (I know they are not gutters, but can't remember what the big metal holes at the side of the road are called.)
- rainbarrel use "graywater" collected while shower warms up to water plants and put in birdbath
- don't use phosporus lawn fertilizer
- rain barrels
- reduced stormwater runoff, use no phosphorous fertilizer, remove debris from street gutters.
- Be aware of what we put down the drains, on the lawn, conserve water when possible, etc.
- installed rain barrel.
- taken chemicals to the toxic chemical recycling service
- No lawn fertilizing No chemical weed killers
- watering lawn less frequently; using dishwasher less frequently
- Picked up trash and cleaned away clogs at storm drain openings
- planted trees and shrubs
- Purchased rain barrels.
- rain barrels, landscape changes to improve stormwater control & increase onsite retention
- Flush toilet less often.
- Non phosphorus fertilizer. Dispose of hazardous waste properly.
- Worked with our lawn management company to eliminate synthetic fertilizers
- Keep drains clear, be careful of what goes down the sinks
- Rain barrels Dual flush toilets
- rain barrel, phosphorus free fert., reduced lawn area, native plantings.
- volunteer work at Argo Pond & Gallop Park. Clean up volunteer for Huron River Days.
- not used P fertilizer or weed killer
- A) Have one bathroom operating on mostly grey water B) Never use insecticides, chemical treatments in the yard
- Watching what products we use on our yard to make sure they're safe.
- conservation and green chemicals
- put in rain gardens, diverted all water run off to other gardens or rain barrels. Only organic soil

Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

## amendments.

- Huron River cleanup. Cleared junk from storm drains. Disposed of toxins properly. No fertilizer.
   Installed low-flow toilets.
- installed a rain barrel; use phosphorus-free fertilizer; installed a rain garden
- avoid spilling/dumping polluting substances into drains or storm drains; install drywells
- don't use fertilizers
- Using less detergent and not running water when brushing teeth.
- organized naturalization of common areas as well as installation of rain garden
- Stream search volunteer. Log clearing.
- Planted shrubs, tree on our lot
- Built a rain garden Participated in Huron River measurement & Clean-up days Double-checked all household cleaners for low/no phosporus
- I choose not to use fertilizers, and do not put caustic substances or medications down the drain.
- don't use pesticides
- eliminated lawn and put in native plants
- Purchased "green" cleaning products for our apartment to cut down on chemicals going into the water supply.
- set up rain barrels, not using chemical for lawn, grow native plants, keep trees in our property, create natural habitat in our backyard.
- Participated in HRWC monitoring, monetary donations
- I volunteered with the stream monitoring program this year.
- cleaned my street of leaves and debris so it doesn't go into sewer area (live on a small court);
   installed rain barrel; set other downspouts to water garden area
- Try to use less water, do not use pesticides or fertilizers.
- Native planting, healthy lawn care, volunteering to help out with river groups like HRWC and FOTR
- Careful when purchasing fertilizer; don't use weed killer. Got new down spouts and eaves with two rain barrels.
- Got rid of my garbage disposal.
- Rain Barrel make sure leaves are cleared from storm drains
- cleaning out debris from the storm drain in front of our house
- Do not use fertilizer. Plant native grasses.
- do not put prescription medications in the toilet
- minimized fertilizer use, encouraged native plant growth along our river edge
- A modest action: installing a rain barrel
- saved househlod water and put out a flyer about not watering lawns in summer
- Conserve Running Water by fitting taps equipment that reduces water usage.
- - less watering of the lawn less water use in the house picking up leaves and glass clippings from the road after mowing
- we do not buy bottled water, because of the plastic bottles in our land fill. We use a britta filter and reusable waterbottles for on the go.
- signed up to be a RiverSafe home
- Visited HHW collection day Used phosphorus free fertilizer Installed a rain barrel

Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

- Reduced the runoff from my property with retention areas.
- Au Sable River Clean Up
- I don't fertilize the lawn
- Educated myself on best practices
- changed to environmentally friendly de-icer for sidewalk, planted a garden, set up a rain bin, no longer fertilize lawn
- rain gardens, rain barrels, compost bins, removed turf grass and replaced with native vegetation.
- No longer raking fall leaves in street.
- Remove debris from streets. Use less water
- PLanted in areas of runoff, so rain water get sucked up by plants and does not go down sewer.
- Switched to more organic, less chemical heavy cleaners.
- Trying to conserve water by not watering our lawn.
- We are participants in Washtenaw County's "Community Partners for Clean Streams."
- No phosphourous fertilizer.
- Phosphorus-free fertilizers. Rain barrel.
- Our household has stopped fertilizing and watering our lawn. We conserve water by turning off
  the faucet when not in use during brushing and dishwashing. When we use our dishwasher, we
  only start a cycle on a full load. We installed low flow toilets and shower heads. We use water
  barrels to irrigate our vegetable garden.
- stopped using fertilizer on my lawn
- by using phosphorus-free fertilizers and use less frequently
- River safe house, no pesticides or fertilizer
- Reduced water consumption.
- We no longer wash equipment and vehicles at home but utilize authorized car washes instead
- I do not flush expired drugs down the toilet.
- Don't use fertilizer with phosphorus
- I don't use fertilizer on my lawn.
- Controlling irrigation amounts and frequency Directing Runoff to areas for filtration Plantings that do not require irrigation
- Participated in HRWC River Roundup and Stonefly Survey Maintained rain barrels
- Rain Barrel, no pesticides.
- no fertilzer, pesticides organic house cleaners
- use less water, especially in garden and kitchen
- Instead of using herbicide I am removing clover and creeping charlie by hand! And we don't use phosphates in fertilizer.
- water conservation, replace grass, shower quicker, kept curb clean of debris
- no fertilizer on the lawn
- Stormwater collection barrel
- no sprinkler system, no fertilizing of lawn or anything around the house,
- less sidewalk salt
- Clean up after dogs always. Don't wash car in driveway.

Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

- increased plantings at edge of yard to reduce runoff, gutters to route most of roof water to back yard, regular cleaning of curb leaves to prevent going down storm drain, install dual-flush toilet
- no fertilizers, spot spraying a few areas with weeds that we couldn't control with pulling.
- reduce water use, install rain barrels
- rain barrel, leaves out of the street
- Use rain barrels; got rid of yet more lawn and converted to perennials; use little weedkiller; compost instead of using garbage disposal
- Rain barrel, less lawn additives
- Had plumbing repairs for small leaks
- Not a new action, but careful about how much water is used, careful not to dump chemicals or medicine in the drain, etc.
- Rain barrels
- Added a rain barrel and special landscaping to hold more water.
- Don't wash car ourselves (take to carwash). Try to not use as much water in our house. Don't fertilize grass.
- river cleanup landscaping
- Using rain water for garden
- put in rainbarrells, only use organic products for fungicides and fertilizers, planted bee, bird & butterfly friendly plants
- I got a rain barrel, stopped using some kinds of fertilizers, only wash my car at the carwash, never throw things in the city drains, put all the waste I can in my waste basket rather than down the toilet/sink. It might not help the river, but I now compost and recycle more.
- composting water conservation active in local government
- Stopped use of any chemicals on lawn
- Improved ground cover to retain rain water
- planted rain garden. talked to neighbors about not using herbicides/pesticides
- low phosphate lawn service
- Use low phosphate lawn fertilizer.
- recycle all oils do not over water lawn
- no fertilizer, no watering
- Became a river safe house with water sheds, rain gardens and water barrel for overflow and drought watering conditions...
- roof rain wash off devered to back yard and not to storm sewer.
- stopped fertilizing lawn
- Quit buying bottled water. Bought 3 rain barrels.
- Acquired rain barrel.
- no pesticide or fertilizer applications on the lawn
- River Safe partner
- Already had a rain garden and detached from storm water system.
- Gotten a second rainbarrel. Replaced additional lawn with greater variety of plants. Watered the garden less by relying on rain barrel.
- participated in haz waste collection day. Minimized yard chemical use. Reduced water usage.
- volunteer for hrwc and have stopped using any lawn products years ago. conserve water during

Q3: In the past 2 years, have you or someone in your household taken action in your home, yard or community to protect our water resources?

summer months allowing natural cycle of lawn dormancy.

- Native landscape, no chemical application
- My spouse bought a shower timer to encourage our teen daughter to take shorter showers. We recently purchased a minimal flow toilet. We built a rain water collector from a car wash soap barrel.

- It just sits in my garage! Having a special "Community Clean out your Garage of Toxics" Day would be a good reminder to take time to do this.
- Recycle motor oil @ auto parts store. Bottles are recycled. Batteries recycled @ Staples, etc. There needs to be more localized collection sites!!!
- Do not have hazardous waste
- we do
- N/A
- Household does use community collection site.
- I Do
- We ALWAYS dispose of household hazardous waste at our community collection site.
- we do use one
- We do as stated in question 16
- We do. See Q 16.
- WE DO Oils-recycle, Paint-to the dump, Glycol-down the tolit
- We don't have old oil, fluids, etc, and we have not collected enough old batteries to make a trip to a community collection site worth it.
- I live in a dorm and don't produce household hazardous waste
- sites need to be available more often
- I use the curbside p/u because of convenience. If none was available, I would go to a community collection site.
- My household does
- We do use the hazardous waste site.
- It's rare that we have these things to dispose of. If we do, I contact recycle Ann Arbor and find out where to take it.
- we do
- its stored in the barn until they have township collection. I don't think as a taxpayer i should have to pay for disposal
- we only dispose of batteries, and I was told by recycle place to toss batteries in garbage, as they do not contain mercury anymore.
- This is a very disrespectful question and I'm offended by it.
- We do.
- already do
- We do
- We do.
- I haven't dealt with hazardous waste
- We do dispose of hazardous waste at the community collection site.
- The question should include a response for those who do use a hazardous collection site
- I do
- Not applicable.
- We do.
- Mine does.
- We do!
- I do dispose...see answer to question 16
- If these are anything like recycling sites, then they are so seldom open (or at inconvenient

Q17: Why doesn't your household typically dispose of household hazardous waste at a community collection site? (Other – please specify)

hours) that it would be impossible. If a site had a 24hr dropoff bins, on the other hand, i would definitely use it.

- Duh?
- We do.
- we do except batteries sorry
- We do.
- We do when they have them
- we do
- I do use collection sites.
- We do use Community collection center
- we do give to a proper site
- We do, but it is not conveniently located.
- We do this
- We use the Home Toxics Progam on Zeeb Rd
- use community collection site
- see # 16
- already do
- above question I answered " at com collection site. Also I believe Coontained Animal Feed Lots which drain animal waste diectly into streams & rivers are an abomination.
- We DO use this site, but it is very inconvenient--required travel to the other side of town at limited hours of operation. More sites for collection would really help.
- Use community collection site
- We live in Ann Arbor Township, so don't meaningful curbside of hazardous wasters, Would like
  to see Townshp contract out trash pick-up to cty of AA, so we get more convenient curbside
  pickup.
- a couple of times a year, I take materials that are hazardous to landfills to a site for proper disposal
- I checked #16 for commty collection site! Washtenaw county has a spring collection at EMU that I save up everything for!
- The car dealer disposes of my vehicle hazardous wastes for me when they change the oil, battery etc. I don't think I produce other household hazardous wastes. Maybe I am not aware of the wastes I need to take to a facility. Please, inform me!
- we do
- we do.
- I've actually only lived in the area for a few months and have been collecting things to dispose of at a collection site... but I'm not sure I know of any, other than on campus at UofM
- We do when necessary, which isn't very often (once in five years).
- Genoa Twp.has an Annual Waste Management Program and also collects used batteries at the township building.
- I do dispose them properly
- Our community, Commerce Township and it's republican trustees don't think it's necassary, they wont fund the program. Republican mentality; climate change and pollution don't exist, And americans should have the right to pollute if they want to. Brainwashed idiots
- We don't make waste we either don't use hazardous products or use everything up.

- n/a
- your question above needs to separate out batteries from the other toxics since they now go in the regular collection (assuming you mean regular AAs, not car batteries) though they used to be separated
- I'm happy to say I don't have a car and so don't have any associated nasty fluids from one, nor
  do I have other hazardous wastes except for batteries of which I have a large collection which
  I'm not sure where to deposit.
- We di try to take hazardous wastes to the community collection site
- I know where one is but the only reason I wait is the cost of disposal. I do not dispose of the chemicals until I can dispose of them properly, but I do worry about having to wait to dispose of them for the safety of my children and animals.
- inconsistent question.
- not open enough hrs.
- I dispose of all household hazardous waste at the community collection site, to the best of my knowledge.
- We do.
- I do
- We do use a community collection site. (Question is phrased wrong)
- We have curbside recycling.
- I already do...
- I don't have any other than used motor oil which I take to O'Reilly's Auto Parts Store
- I DO DISPOSE OF AT COMMUNITY COLLECTIONS SITE
- we do
- Our household does dispose of household hazardous waste at a community collection site.
- We do use it
- Also, It doesn't come up a lot. Car oil is changed at a service station, I have pretty decent rechargeable batteries and avoid buying harmful chemicals and pesticides.
- I do
- We do dispose of household hazardous wastes when we've accumulated enough to make the drive to the county disposal site on Zeeb Rd.
- We take oil to local stores. Don't want to pay to recycle other items.
- We do dispose of household hazardous waste at a community collection site.
- Just lazy haven't gotten around to it.
- See question 16
- havn't had any since they guit curbside collection
- Don't get around to figuring out where it's located, what it takes, what it accepts, etc., whether are containers are acceptable, etc.
- But someone at my work collects all our battaries and takes them in for us.
- N/A
- We do! We use the (Washtenaw) county program.
- Question not applicable to me
- fees are charged to go to the community collection site
- We do.
- I think the state of Michigan and the city of Ann Arbor totally sold the citizens out with the

Q17: Why doesn't your household typically dispose of household hazardous waste at a community collection site? (Other – please specify)

Galman/Pall dioxin pollution problem in our water supply.

- See question 16: we do!
- I do
- Hours at the RAA DOS are too short. Hours at the Wasthtenaw county hazards collection are comically short.
- we do use the community collection site
- I do
- Have only disposed of at collection site!
- we do
- we do take it to comminity collection
- I think the community should have more special collections for those materials.
- we have a pick up
- We do the use the community site
- Not applicable
- We do typically dispose of household hazardous waste at a community collection site. That wasn't an option for Q. 17.
- we do
- we dispose of batteries at Hear USA, our gas station accepts used motor oil, we dont use pesticides
- We DO use community collection sites.
- We always dispose of our hazardous materials at a collection site
- But I DO!
- I DO use community collection site. See question 16
- Don't really have any.
- we do
- I do
- Out those things out at special collection,
- We do.
- I do
- Do use collections site
- We do use those sites. Not a problem.
- WE DO
- too old to transport it
- we do at the Washtenaw County Hazardous Disposal program on Saturday's
- collection times can restrict drop offs
- I do
- recycle
- I do.
- We do
- I take it to the Ann Arbor Drop off.
- We do it.
- I do use a community collection site, see answer above
- i do

- There is a disposal place in AA.
- I don't have the need to.
- we DO use a community collection site
- I do
- We do
- We dispose of haz waste that Ann Arbor will pick up. Something large we take to waste center.
   Small we put in trash unless AA has a program to pick up separately.
- But, I do use a community colection site
- We DO dispose of household hazardous waste at a community collection site.
- we do
- Don't really have haz to dispose of, and it is also expensive here if you do.
- It's not just finding the time...need to collect the waste products, prepare them for a car ride, drive across town, pay fees.
- I don't have a car.
- At this point, I don' have any hazardous waste. No paint, pesticides, batteries, etc. I have a few battery items, but I use Lithium, so I haven't had to change it yet. When I do, I will research where to dispose of it.
- other not convenient
- when there is one we make use of it... Pioneer HS for instance
- We use community collection site
- have to pay to get into the disposal site
- Fluids from vehicles and batteries? Don't have any. Mechanic does it.
- We do
- I take it out to zeeb rd
- I do
- We do
- We use the local household hazardous waste sites.
- I do it but it sure is inconvenient. I never remember the hours, the location, or the protocol. Have to look it up each time.
- We do.
- we do-
- we do!
- we do, when drop off is avaiable
- I take batteries to the recycling center (and pay for the privilege, which I think is bad public policy and I tell them whenever I can), I don't have any oil, I have a very old paint cans and pesticides stored in my basement just waiting for an easy way to appropriately dispose, I know they should not go in regular trash or on curb, but could benefit from more awareness/info about community collection options.
- we do
- Use the facility on Dexter-Pinckney
- Not as convenient as probably needed.
- We do
- I do.
- (we do use community collection site)

- i do
- we do
- not applicable as I do use a community collection site
- we do typically dispose of h. h. wast at a community collection site.
- We do.
- we do
- We do!
- If it's not part of the curbside program, then I do. (not well worded question)
- We strive to avoid using hazardous materials that would require special disposal.
- I do wish there were more sites and times available throughout the season in the A2-Ypsi area or in the areas within 20 minutes outside of these cities.
- I do--see #16
- we do
- I do take our household hazardous waste to community collection sites.
- I don't think they take motor oil for free. The rules for batteries are confusing.
- Do
- We do use a community collection site
- We do
- don't have much of it
- Ido
- See answer to question 16
- I do
- We do
- We do. I follow Ann Arbor's instructions for disposing of chemicals, paint, batteries, CFLs etc.
- Cost. And I feel terrible about saying that. But my heart is MUCH bigger than my financial resources.
- I don't handle hazardous waste.
- we do
- I do!
- We DO dispose of our hazardous waste at a community collection site.
- I do dispose of hazardous waste at a collection site.
- We do. See #16.
- That would be the only reason why I wouldn't, but I do.
- We do dispose these substances at a community collection site.
- Yeah, we do.
- we do.
- We do typically dispose of household hazardous waste at a community collection site.
- we do
- At a service station where we have oil changed on our car
- Ann Arbor provides curbide pick up of motor oil.
- I do.
- Sometimes it is hard to know what is hazardous, and where the appropriate community is. In the case of computers, when the free program happens.

- When it is filled, the fluids get recycled. Other chemicals are used up so no waste.
- only small batteries
- we do
- we do use the county hazardous waste collection site
- we do see #16
- We do take it there. However, the hours are inconvenient, so these items accumulate for over a year before we can take them to the site.
- We do
- Curbside collection is provided
- Don't deal with much hazardous waste.
- do
- See answer to 16.
- I keep batteries in a plastic jug at home until I can get out to the recycle place it's a long bike ride from my house and I don't own a car.
- Limited collection times.
- Do not dispose of these materials, as I like in an apartment complex and see someone to have these services completed.
- We don't dispose of these materials. If we did, we would use the community collection site. They would never be dumped or put into the trash.
- We do use a community site. This question does not apply to us.
- We do!
- We do, but a possible help would be to have convenient times and locations for the drop off of hazardous waste.
- but I do use a hazardous waste facility
- N/A
- only dispose of waste at collection days
- Don't have any that need disposal.
- At my work place
- we do (see #16)
- That is where I dispose of HHW. See question 16.
- Haven't needed one
- don't have hazardous waste
- I do take it to the community site....
- We do
- previous question has stated our household does use community collection site. Need to edit this question for redundancy
- i DO
- We always use collection sites
- i do
- Don't hazardous waste. Car mechanic deals with the old battery and motor oil
- I do see answer to question 16. You need to fix this survey question.
- We use recycling and waste processing through a third party company licensed to dispose of waste.
- Too much of a hassle to go to toxic waste drop off. Not well known/advertised. Very limited

Q17: Why doesn't your household typically dispose of household hazardous waste at a community collection site? (Other – please specify)

hours

- n/a
- they have extremely limited hours and have to drive there. I am really stuck on what to do with my CFLs.
- We do dispose of those things at a community collection site.
- I do!
- I do
- I'm not sure that I have much hazardous waste. I suppose I have the occassional bad battery, but I just have them in a junk drawer!
- Batteries are really our only household hazardous waste. Can no longer recycle batteries in Ann Arbor.
- I do, but sometimes it sits for a while until I get there.
- Haven't had hazardous waste to dispose of yet.
- We do.
- We do
- We do!
- We do....faulty question
- I can drop off motor oil and filters at a nearby auto repair facility
- Uh, we do.
- I do dispose of household hazardous waste at a community collection site.
- Infrequent collection dates near my home (but we do use them)
- I already do!
- we have taken all of our hazardous waste to a community waste facility that properly disposes of the waste.
- We do dispose at a collection site. Zeeb Road rules !! If I could only convince my daughter to stop wearing nail polish...

Q30: Where would you prefer to receive information about what you can do to protect our lakes and streams?

- Commercials
- refrigerator magnet with information and helpful hints
- other folks may need reminders but we're pretty aware
- As many sources of clear, friendly information as possible, for my household and all other households.
- Materials distributed through local libraries. Any & all of the above choices would be welcomed. but cost and cost-effectiveness is always a consideration. It's essential that it not just be "preaching to the choir"!!.
- Our community is centered around a lake. Educating our whole town is very important.
- The Calendar I receive each year and the news flyer that comes with water bill are filled with great information on this. Thank you! I want EVERYONE to learn better ways, from school children to local businesses.
- I am very aware of what needs to be done I would prefer assistance to doing them such as tax incentives to pay for the rain barrels or curbside collection of hazardous materials things like that which facilitate and make the process either cheaper or easier. I don't need more information.
- INDUSTRY!!!! Lawncare professionals, Companies that deal in hazardous materials!
- Shift to e-newsletters and away from paper, billboards and other stuff that clutters our space
- Waste watcher magazine
- the more the better.
- Clever ads are effective memorable and like sound bytes for busy people
- I already receive newsletters via mail and email and keep them. I look up materials on internet per these mailings, support local environ groups yearly and pass on my emails to friends/family from the HRWC, share facebook pcs. from HRWC on my facebook wall.
- mail, flyers left at door
- I already know more than most people. i would think that something that is mass info would be helpful
- Ann Arbor Observer magazine we keep and read that
- Re-skilling workshop
- npr radio
- Inform, Inform , Inform Inform the public!!!
- I am a teacher (3rd grade) and we teach about habitats and environmental protection. Are there materials that you can send me to pass along to my students?
- I listen to Greening of the Great Lakes on WJR radio station.
- I get materials from environmental groups and city government via email. Prefer not to get it on paper.
- HRWC !!!!!

- Cleaning up abandoned housing sites.
- Global Warming, Recycling/Reuse, Buying Local, Local Farm Support
- Dumping trash/waste in the storm drains, using lawns to beautify gardens when there are so many better ways to do the same (native plants, vegetable gardens, etc grown organically), climate change, human-animal conflicts
- keep the Great Lakes Clean
- Great lake water levels and corresponding quality.
- Maitaining quality of lake water and individual well water.
- no
- toxic metals leeching out from old pipes and in the water we drink, bathe in, wash dishes and clothes in; also biological particles (big ones) in our water supply (we installed a filter and were shocked by the substantial particles that gathered immediately)
- Stream and lake bank erosion Algae blooms in Ford and Belleville Lakes Stormwater management
- The fact that plans for new SEWER LINES have been shelved in the (Oakland County) Lakes area "due to the economy". It seems sewer installation is: 1) desperately needed for the environment, and 2) work/jobs (which may be supplemented by an economic stimulus plan).
- would like to plant more trees, but not sure which are good for this area
- When you say "Fertilizes" I say yes because I spread my compost twice a year. I am developing a
  digested for my Dogs and Chicken manure, so that will not have to go in the trash much longer.
   When I wash my cars and motorcycles I use biodegradable cleaners, and rub more rather than
  dissolve.
- save argo dam
- phosphates in the water
- Our lake gets treated TOO often for zebra mussels and keeping the weeds down.
- water cleanliness and fish quality
- Taking care of the quantity and quality of our water.
- I am wanting to purchase a barrel for composting but the cost is too high. More people would compost their garbage, grass clippings and leaves if the barrels were affordable.
- Why the mobile home park on Rushton and Nine Mile Rd. Has a different standard for waste water treatment than the city of South Lyon, Mi.
- Removal of unneeded dams.
- High iron in water
- nc
- In heavy rains the Huron River is more polluted. How do we know when the Huron River is having a high pollution day? Could we be notified?
- Over use of plastic water bottles. Would be nice to reduce use of plastic water bottles that are often used once and then recycled.
- invasive species
- Storm water is a major concern; Also, in question 31 above both my husband and I wash the car, mow the lawn, maintain vehicles, wash the car, and pick up after our dog and probably about equally.
- NAP seems to be engaged in more environmental damage than good. This sanctioned destruction of habitat needs a less whifty explanation than "returning to a native state" circa when and in what context.

- Allow rowers to continue using Huron River, especially Argo pond. If yoiu mess with Argo Pond, you lost all of my support.
- We should fine/punish litters and polluters more severely.
- Too much salt is dumped (sometimes an inch deep!) in public places (sidewalks and parking areas) during wintry weather, including at the public schools, retail stores, and even at metro parks. I know this flushes straight into the river, as well as killing plants nearby that would otherwise take up excess water and clean it.
- We live on a unpaved road. It seems that water run off could be managed more environmental friendly. There are no ditches for drainage. Gravel is put on the road but when there is a rain storm or the road is paved it is thrown onto our lawns. We live on Charing Cross. What is done or can be done about this?
- Too many to list! In general, the state of the earth's health totally!
- Hydraulic fracturing
- The quality of our drinking water
- Most apartment complexes don't have any recycling bins or recycling program. That's A LOT of unrecycled recyclables. Could someone please come up with a strategy to address that? It's not only home-owners that need to recycle!
- agriculture
- Maintaining quality of well water.
- How safe is it to swim in the Huron River? :/
- People pick up dog waste, put it in plastic bags and drop it back down on the ground so that someone else has to pick it up.
- Yes
- Yes, I am very concerned about the possible environmental impact that could be the result of the proposed changes in the Northfield Twp. zoning ordinance for the hamlet area of Whitmore Lake. If the homes that are currently lakeside residences are permitted to have business on the first floor, and lakeside parking, I am very concerned about potential impact on Whitmore Lake of the auto chemicals and salt from cars that will be parked close to the lake. This is going to come before the Board of Trustees soon (today is 12/15/2011) and I wish that someone with knowledge of this could talk to the Board of Trustees about this.
- More bike lanes. More nature preserves and hikes. The contaminated Lower Town undeveloped lot that is leaking into the Huron River. The gas tanks left under the shack on the corner of N.
   Main and Summit leaking into the river. The entire River St Project in Ypsilanti.
- Eradicating invasive species and objection to the use of the term "environment/al."
- Water quality, recycling, energy use, lowering carbon footprint, invasive species
- Areas lacking in my area: Monitoring/testing of local lakes and waterways. Educating the public about safe and responsible water practices. Enforcing local ordinances. I am also concerned about protecting wetlands and managing invasive species.
- Get Huron river clean enough to swim in so we kayakers aren't afraid to fall out of our boats for fear of water fowl waste.
- communities mandatory septic checks and cleaning and better ways to not have standing water
- Rid our state of businesses where hogs & cattle raised standing in their own waste which is then washed to a farm drain or stream.
- Water quality and water diversion eg to the southwest from the Great Lakes
- How do I get rid of poison ivy without using nasty chemicals? I struggle with this. On a larger scale, I'm very concerned about fracking and climate change.

- global warming
- They are all impt...interconnected.
- Sedimentation
- I very much appreciate the work of the HRWC in keeping me informed by email of efforts and events.
- Ive called multiple people (Drain Commissioner, DNR, etc.) about the landscaping and hazardous waste that is repeatedly dumped into ditches off of Merritt Rd., just east of Whittaker in Ypsilanti Township. I guess no-one cares because it is still there. I can only pick up so many tires and gallons of oil myself? I Dont know what to do with the lanscaping waste???
- The amount of waste that our society produces waste in packaging, throwing away food, junk mail, waste of electricity, etc.. i feel it's depleting our natural resources.
- In SE and southern MI Habitat loss or the assumed habitat benefits of agricultural lands in preservation programs, compared with restored or preserved landscapes most beneficial to wildlife
- The fertilizer run off from Suburbia.
- road salts may be polluting the watershed, and killing grass and young trees near walkways and roads.
- invasive species
- Having worked with watershed groups in the past, it seems like this survey has hit the major issues. The need for riparian buffer zones and stream bank restorations is also a big need, and something the public doesn't seem to know much about.
- Proper use of weed killer and fertilizier.
- reduced government regulations, oversight, staffing, and focus. Attitude that environmental protection should be sacrificed for jobs/economic reasons. Reduced public demand for environmental protections (apathy!).
- Burning of leaves and trash which increases air pollution.
- Invasive species, both animal and plant in our lakes and streams. Uses of our Great Lakes.
- Roadway runoff into lakes
- Cutting down mature trees rather than trying to help them survive.
- Zero population growth.
- Failed and phony wetland creation projects that the DEQ approves and does not supervise; corporations and developers that are still getting away with all the wrong practices; lack of enforcement of current laws and the threat of loosening environmental protections.
- Waste from Agribusiness. The proliferation of poorly regulated agribusiness in Michigan.
- Keeping the water safe is my primary environmental concern.
- Global climate change Refusal of US to pursue solar energy Protection for the Great Lakes-water quality and shorelines
- Contamination of water by minute amounts of prescription drug byproducts, which affect consumers of water though this cannot be tested for. Addition of flouride to water rather than compulsory applications to those people it will be good for, if any.
- Traces of prescription and OTC medications that are in our water. Over time these have health consequences.
- nc
- environmental care often, but not always, requires money. I know some incentives, like low interest loans and tax breaks have been offered in areas (ie Colorado Springs) suffering from drought to encourage native and water-conserving landscaping for residential areas. I would

Q32: Are there any environmental concerns that you have that you feel are very important?

love to have some way to improve my home, put in native grasses that do not require mowing nor watering, but the cost and time involved is just totally unreasonable for my single-mum-run family. However, it would be great to receive information about environmentally friendly native plants and product from non-businesses. Advertising businesses that sell the products is okay and completely acceptable and welcomed.

- yes, there are many.
- keeping the ground water uncontaminated
- Water quality
- climate change
- No
- Too much plastic is thrown away on the ground, including plastic water bottles.
- Free the Huron River from unnecessary dams!
- MANY, but the one that is so easy and so neglected is leaf burning. Leaves are a tremendous resource, on one hand, and a very noxious problem (particulate material) on the other, not the least being to asthmatic people. I think it is mostly a matter of education and awareness. If a person does not want to collect them to use as garden mulch, they can be so easily mulched into the lawn simply by using a mulching mower. And many people seem unaware that it causes severe problems for other people. The wind blows it away from them, and that's the end of it. They just stand upwind from their smouldering mess and continue merrily and obliviously on. (...end of soapbox...)
- HAVING SAFE DRINKING WATER SUPPLY
- i feel that homeowners should be somehow "assessed" if they create impermeable surfaces. so e.g. if someone builds an addition or paves a driveway, they should be assessed a fee for creating more run off.
- quality of drinking water
- Protecting the water in the Great Lakes basin is of concern to me.
- Water quality tests for industries that dump into our water supply can and have been taken within 3' UPSTREAM from the discharge site, which negates their accuracy.
- Think you have covered them
- Should have a waste burning ban throughout Washtenaw county.
- Amount of salt used during winter to me, that seems like the long-term effect has not been studied or publicized. Light pollution, especially towards migrating birds. Reduction of native plants for butterflies and wildlife. Invasive species.
- I am very concerned about the loss of farmland and habitat for birds and animals in our community.
- Chem Lawn and it's ilk. Can't I prevent my neighbors from using them? I know that poison doesn't just sit there nicely on their side of the property line!
- All of them.
- Preservation of open space.
- Decreased funding to protect and monitor air, water, soils. Govt failure to take drastic action because of big business taking precedence over environmental issues ie Asian carp in Great Lakes.
- longer-term environmental issues: water shortages, climate change
- Awareness of environmental concerns in general
- water, air quality, global warming

- impervious surfaces of new construction. 'green' roofing
- The dioxine pollution in Ann Arbors water supply.
- treating ballast discharge water
- water quality
- Quality of the water in the lake in my front yard. Education about reduce, re-use, recycle.
- Global warming
- I feel the public is ignorant of how dangerously low the water supply is and more stringent water standards need to be implemented because I don't think the public is willing to sacrifice their water habits without some type of mandate.
- Noise and light pollution
- Household energy conservation to help avert climate change.
- We need to know more about watersheds I'm in the Allen Creek watershed, yet most of my neighbors are clueless - they ask - where is the water?
- Not putting medicines into the water system. Using less 'perfumed' wash products. More native plant use.
- Lack of Enforceable. Regulations and will to enforce.
- Move people away from traditional lawns with laws and incentives to encourage that for
  example the strip of lawn between the sidewalk and the street should not be planted with
  grasses which encourage run off they should have native plantings either grasses or flowers.
  There are many public lands which could be moved away from lawns and could have other type
  of plantings.
- Non-rechargable batteries: How are these to be disposed?
- rain garden and rain barrels.
- GLOBAL WARMING!
- that everyone follows reasonable rules
- I live in the City (AA) and would like to install a well for watering my lawn in the summer but have received confusing information from the county and city regarding this. Could you let people know about any rules that apply?
- Mercury and radon in coal smoke from electric power generation
- air quality. Planes, cars spew pollution.
- All of them. :)
- Yes, I am concerned about the residue of pharmaceuticals and personal care products ending up in the water. I know the AA water treatment system as is cannot filter these, but that such systems exist. Have read of them being installed in major cities in Europe--not high tech, necessarily, but simply another system to filter these metabolites. I am also concerned that so many homeowners in AA blithely use glyphosate (RoundUp) as though it were harmless. Certain areas are saturated in it, and this turns up in the runoff after heavy rains, going right into the sewer system/river. Horrendous. These products and also lawn services that use them should be BANNED, as they have been in many cities and whole provinces (Quebec) in Canada. I would love to see AA follow this example. Further, AA water system could save money by HALTING the addition of poisonous fluoride to the water. There is abundant proof that this water additive is harmful--China will sell us all the fluoride we'll take but they themselves DO NOT USE IT IN MUNICIPAL WATER SUPPLIES. This is a well-recognized poison, and even the dental profession is coming around to recognizing this. Please consider dropping this poison--avoiding it is one of the reasons I buy bottled water to drink.
- none

- Can we do anything here to stop the Keystone pipeline?
- City of Ann Arbor uses sewer and stormwater fees as a slush fund, regardless of their intended uses. This immoral thievery robs funding for the environment.
- I Have raingardens, that my grandmother taught me about, your employees won't even 'consider' them as they're not exactly what is recommened. My grandma knew more than this employee! The City needs to hire people who know how to Think, not just read rules and say NO!!
- I don't feel like there's enough protection for the Great Lakes; fresh water is our most precious resource.
- yes I am concerned about the large amount of roadside trash--papers and bottles
- Mostly to teach kids at school, to start them at an early age.
- overpopulation seems to be root cause of most issues
- Just recycle as much as you can.
- invasive plants
- Illicit discharge
- uhm... I am very concerned for the environment. We have a gap that needs to be bridged to avoid distroying it!
- people not picking their dog pup and throwing waste in backyard.
- clean water
- Air quality, randon, asbestos.
- population growth, air, land and water pollution
- my neighbors use lawn care services that spread toxic pesticides and fertilizers in an effort to maintain a totally unnatural thing: their lawn
- Preserving our groundwater quality
- Continue to improve clean water programs. HRWC is great, but get the city of Ann Arbor to do more and make it more convenient.
- Yes, strengthening environmental laws instead of courts ruling in favor of the polluters.
- Rain barrels are MUCH too expensive. Would be very interested in buying two if you could buy bulk and sell them to residents for less than \$50/ea.
- Homeowners not keeping sewers clear at/near their property.
- Manage Canada Geese population to reduce waste (e. coli) input to rivers, streams and lakes.
- Not at this time.
- Government allowing big business and industry to encroach on our greatest natural resources.
- I wish the Huron River in A2 wasn't so murky and full of algae in the summer. I wish the rowers weren't on the river with bullhorns and motor oats during every minute of daylight. They hog the river as if they own it. I would love to see the water quality improve.
- I am highly concerned with the lack of enforcement or focus on sediment and erosion control. It varies dramatically depending on what county. There needs to be a greater field presence from the overseeing agencies across the board. AND there needs to be much more effective BMPs on construction sites, even when they are present.
- Decrease car use; make public transportation more popular; protecting our Great Lakes and watersheds.
- We live near a modular home community the sewage system they use is not appropriate it allows unclean water to enter the Huron River watershed.
- Pall Gelman plume approaching our drinking water, and lack of enforcement of reasonable safe

standards for ppm.

- pesticide in water
- all above
- comment- i live in a condo, so lawn/grounds maintenance is performed by others. i don't know what kind of fertilizer is used, or what is done with leaves and grass clippings.
- I'm concerned about Mallet's Creek Watershed and the entire ecosystem, pure water is very important. I do what I can. Thanks for the calendar!
- climate change, extinction crisis, invasive species
- What's the status of the asian carp? Feel like I haven't heard anything new about the situation in awhile
- fixing/improving erosion on tributaries to Huron River, such as Fleming Creek.
- pollution of lakes and streams air quality lack of control of geese
- relax the red tape and lets drill for oil!!!!!
- fertilizer and agricultural run off
- No
- I am wondering about the settling basin for City of Ann Arbor Water Plant -- the basin is just south of M14 and just west of Wines and Forsythe Schools. I wonder if wetland could be restored or built there. Would like to work on this project.
- Barton Dam, crumbling bridges over waters, hazardous waste from residents not getting to/the proper disposal, people not planting better choices in their beds for insects and birds to eat.
- All
- Education on hazardous material disposal.
- Flooding/drainage in the Arbor Oaks/Stonybrook subdivision in Ann Arbor.
- filtering storm water before it gets to the watershed channels (streams, rivers, lakes)
- Water consumption
- very worried about the quality of the great lakes, about noise pollution growing in our neighborhood, about loss of big trees in our neighborhood not being replaced
- Discharge of dioxin from Gelman/Pall into water
- One of the activities that should be listed in addition to canoeing, boating, swimming etc. is HUNTING. This is often done near WETLANDS, RIVERS, LAKES! though Ann Arbor is not a hot bed of hunters, Washtenaw Co has LOADS of hunters and they are in nature probably almost more than anyone.(BTW i am not a hunter but know many)
- Removal of invasive plants (crowds out native ones)
- Being a wise user of water
- I would like to make sure that our drinking water is safe.
- I hope that we will get the information about caring for our lakes and streams out to as many people as possible. I believe that people will change their habits if they know what to do.
- Air quality wish the police could ticket those vehicles that have terrible/inefficient exhaust systems.
- Absolutely. I think making AA completely bike friendly would be awesome!
- environment is in decline
- All of them :).
- water quality
- Hazardous waste.
- no

- Pollution
- Pal-Gelman waste.
- how to clean up and dispose of the new energy efficient lightbulbs.
- Yes, why are you "collecting" bugs? Leave the darn bugs be! Count them if you wish, but stop disrupting their lives. You do more harm than good.
- I am not only concerned about the quality of water but am concerned about the availability of water for populations suffering from drought.
- reducing consumption, non gmo foods.
- I'd like to see permeable medians on State Street near Briarwood. I'd like to see more planting/replacement of street trees in Ann Arbor.
- Oil and gunk floating on river, or at least trapped in eddies where I put-in my canoe.
- global warming
- air pollution, particulary from U of M source.
- city should inform lawn care service companies NOT to blow grass clippings/leaves into the street
- using environmentally friendly substances in winter to de-ice roads
- water pollution with hormone mimicking agents and pharmaceuticals
- I would be happy to use a rain barrel, but the cost is prohibitive.
- overuse of pesticides/herbicides
- I would really like to see mandatory recycling throughout washtenaw county.
- Willow Run hazardous waste site at Tyler Rd
- Threat of Asian Carp
- Stormwater! and water quality in general
- Protecting the Huron River and Great Lakes
- The plant growth in the river is distressing, making it difficult in some places to get boats in the river, fish or sail. Our river is so beautiful and needs our protection!
- Dirty energy; unchecked ex-urban development; factory farms...
- too many to mention
- None at this time.
- Not at this time.
- Agricultural runoff/Golf courses
- Yes, our drinking water !!!!! Yes, our land and air we breath !!! We, all have to do our part no matter how little it seems it goes a long way. Think of what we are leaving our children with.
- Maintenance of wet land areas. Prevent draining wetlands even those less than 2 1/2 acres.
- We are not doing enough for Land preservation and grass lands & Wet Lands
- By "picking up litter", I assume we should sweep the gutter occasionally. I'm going to do this now.
- What goes into the street gutters What is flushed down toliets run-off from parking lots-raingardens should be required
- pollution of water, air, & food supply, landfills, exhaustion of limited natural resources, global warming, cell phone radiation... (I guess there are a lot.)
- First do the least expensive things, then gradually do those of low to moderate cost. Save money so more can be accomplished with a limited budget
- The rise of ambient or background chemical hazards to health---too many chemicals used for too many things, often unnecessarily.

- air pollution, and global warming.
- Global warming should stop because it is endangering animals such as the polar bears.
- Illegal dumping of toxic materials into our environment such as landfills, lakes and streams where nobody knows about. The underworld may be behind it.
- sewer back ups in the basement
- I am constantly very upset about the amount of trash litter in and around the student neighborhood around the University of Michigan campus. The students throw trash all over their lawns and it stays there for long, long periods. For weeks, I walked by the corner of Thompson and William streets where trash cans were overturned, garbage strewn on sidewalk, 3 old dirty mattresses lay on the sidewalk, broken glass all over sidewalk, and it stayed there for many weeks. Doesn't the Mayor or other city officials see this mess when they drive, walk, bike around Ann Arbor? How can eye-sore trash heaps sit out in the open for long periods without clean-up? It's totally amazing that Ann Arbor doesn't have a serious rat problem. Right now, if you go to the left side of the Michigan Union, and look at the back of the fraternity house there, and see the heaps of trash laying outside the trash can. I tell you, I can't believe the rats aren't living there. Supposedly the City has a community standards office that fines \$100 to clean up trash, why don't they work harder at following through on these trashed houses and lawns? That's my biggest environmental concern in Ann Arbor the trash on lawns, sidewalks around UM campus in students housing neighborhoods. It's a serious problem, a real eye-sore for Ann Arbor, and health threat for rat invasion.
- I wish the city would ban lawn fertilizer and pesticide use.
- yes, I think NAP should stop using rodeo in bird hills, kuebler langford and Barton nature area
- noise pollution
- no
- runoff from agriculture feels out of my control and yet is very important. how can an individual get farms to use less fertilizers, aside from buying organic and encouraging that market?
- Everybody having access to sufficient potable water. Reducing people's reliance on bottled water.
- Just making a lower carbon footprint...finding out how
- NO
- continue to educate our children on these issues
- That our state and federal government don't do enough about legislation and monitoring of pollution/climate change.
- yes--golf courses, along streams, contribute more chemical runoff than households. Your campaign is directed in the wrong place.
- Garbage truck often leaks fluids from waste compartment onto road. These fluids appear to be
  of a petroleum based substance because it stains the asphalt pavement dark and remains for
  months. Recently happened on Pine Brae St. Should garbage trucks have waste compartments
  sealed so that fluids cannot leak during transport?
- Gelman 'plume.' Downtown Ann Arbor exhaust, esp. since city sits in a bowl. Citizen ignorance. Huron River looks bad.
- How to properly dispose of pharmaceuticals.
- We deliver solar power education regularly, and are curious about the assumptions behind the 24.5 H2Ogal/day/household reported in the Good Guide. Thanks.

County	Zipcode	City	Frequency	Total
	48073	Royal Oak	1	
	48165	New Hudson	1	
	48301	Bloomfield Hills	1	
	48302	Bloomfield Hills	1	
	48307	Rochester	1	ļ
	48334	Farmington	1	
	48346	Clarkston	1	
Oakland	48356	Highland	1	46
	48357	Highland	1	
	48375	Novi	1	
	48381	Milford	1	
	48382	Commerce Township	17	
	48353	Hartland	1	
	48386	White Lake	1	
	48178	South Lyon	9	
	48390	Walled Lake	6	
	48393	Wixom	1	
Wayne	48101	Allen Park	1	
	48150	Livonia	1	
	48173	Rockwood	1	
	48187	Canton	1	
	48188	Canton	1	
	48111	Belleville	4	25
	48134	Flat Rock	1	
	48154	Livonia	1	
	48164	New Boston	1	
	48146	Lincoln Park	1	
	48167	Northville	2	
	48170	Plymouth	9	
	48195	Southgate	1	
	48114	Brighton	2	
	48116	Brighton	14	
Livingston	48843	Howell	6	1
	48855	Howell	3	41
	48137	Gregory	2	
	48836	Fowlerville	1	
	48169	Pickney	13	

Washtenaw	48118	Chelsea	8	
	48130	Dexter	13	
	48175	Salem	1	
	48176	Saline	2	
	48189	Whitmore Lake	13	
	48197	Ypsilanti	31	572
	48198	Ypsilanti	19	
	48191	Willis	1	
	48103	Ann Arbor	234	
	48104	Ann Arbor	121	
	48105	Ann Arbor	88	
	48106	Ann Arbor (P.O. Box)	1	
	48107	Ann Arbor (P.O. Box)	1	
	48108	Ann Arbor	38	
	48109	Ann Arbor	1	
Monroe	48117	Carleton	1	4
	48160	Milan	3	
Macomb	48313	Sterling Heights	1	
Genesee	48430	Fenton	1	
Ingham	48842	Holt	1	
Kalamazoo	49009	Kalamazoo	1	
Jackson	49201	Jackson	1	10
Lenawee	49286	Tecumseh	2	
Manistee	49660	Manistee	1	
New York	10037	New York	1	
Not Identifiable	481045		1	