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2014 Great Bend of the Wabash Watershed Urban Residents vs Rain Barrel Adoptees Survey Comparison Executive Summary

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Urban Residents vs Rain Barrel Adoptees
Survey Comparison
Executive Summary

This executive summary highlights key findings from the comparison between the survey of urban residents and of rain barrel adoptees in Great Bend of the Wabash Watershed both conducted in 2014. The comparison between two different groups of respondents focused on the same questions asked in both surveys, including their opinion about water quality issues, their perception about local water quality, and their demographic profile.

Survey Method

The survey of urban residents in Great Bend of the Wabash Watershed was conducted by Natural Resources and Social Science lab at Purdue University in late 2014. Questions included in the survey focused on respondents' background and demographics, characteristics of their residence, their perceptions and opinions about local water quality, their usage of and attitudes towards various conservation practices, and their awareness of and participation in local outreach efforts. The survey was mailed out to 1100 urban residents of Tippecanoe County, which the list of addresses was compiled from a mailing list purchased from Survey Sampling International. Of the 1100 surveys sent out, 87 were returned as bad addresses, 278 were completed by mail, which achieved a response rate of 27%.

The survey of rain barrel adoptees was conducted by the Natural Resources and Social Science lab at Purdue University in summer 2014. Questions included in the survey focused on respondents' perceptions about local water quality, their constraints in adoption and maintenance of rain barrels, their awareness of various best management practices, and themselves in terms of background and demographics. The list of addresses was compiled from the entire list of 461 rain barrel adoptees in Wabash River Enhancement Corporation (WREC). Of the 461 surveys sent out, 41 were returned as bad addresses, 127 were completed by mail, and 188 were completed via online survey (the alternative option noted in the mail survey), which achieved a response rate of 70.0%.

Key Findings

Profile of Demographic and their Residence

The profile of urban resident and rain barrel adoptee is shown in the table below.

- There are no significant difference between urban residents and rain barrel adoptees respondents in terms of respondents' age, education level beyond college, and residential lot size less than one acre.
- More females responded to the Rain Barrel Adoptees Survey than the Urban Residents Survey.

- The percentage of respondents with high school diploma and some formal school in Urban Residents Survey was higher than that in Rain Barrel Adoptees Survey; the percentage of respondents with college and graduate degree in Rain Barrel Adoptees Survey is higher than that in Urban Residents Survey.
- A higher percentage of respondents in Rain Barrel Survey lived on residential lots more than one acre.
- More respondents in Rain Barrel Adoptees Survey lived in their own property than that in Urban Residents Survey.

Survey Respondents Profile		Urban Residents	Rain Barrel Adoptees
Gender	Female	38.8%	57.4%
	Male	61.2%	42.6%
Age	Mean	60.4	55.1
	Range	24~96	25~92
Education	Some formal schooling	3.8%	N/A
	High school	17.0%	8.6%
	Some college	16.6%	12.9%
	2-year college degree	7.5%	9.7%
	4-year college degree	21.5%	30.5%
	Graduate degree	33.6%	38.4%
Residential Lot Size (unit: acre)	1/4 or less	67.4%	63.7%
	More than 1/4 but less than 1	28.0%	23.0%
	1 to less than 5	4.6%	10.1%
	5 or more	0.0%	3.2%
Home Property	Own	88.2%	97.9%
	Rent	11.8%	2.1%

Opinions about Water Quality

- Rain Barrel Adoptees respondents were more likely to strongly disagree that it is okay to reduce water quality to promote economic development. Rain Barrel Adoptees respondents were more likely to strongly agree that it is important to protect water quality even it if costs me more, and that I would be willing to pay more to improve water quality.
- Urban Residents respondents were more likely to identify Algae in the water, and not enough oxygen in the water as water impairment problems in their area.
- Rain Barrel Adoptees respondents were more likely to say that stormwater runoff from rooftops, parking lots and roads, discharges from sewage treatment plants, improper disposal of lawn waste, oils and chemicals into storm drains, and street salt and sand were problem sources for water quality pollution in their area.

- Urban Residents respondents were more likely to identity fish kills, and lower property values as the problem consequences of poor water quality.

Attitudes towards Various Conservation

- From urban residents' experience about Best Management Practices (Figure 1), rain barrels were ranked as the most familiar one: only 5.5 % of them said they never heard of it; 53.6% said somewhat familiar with it; and 32.3% said they knew how to use it but not using it currently. Grass swales was ranked as the least familiar practice for urban residents (59.8 %, n=219);

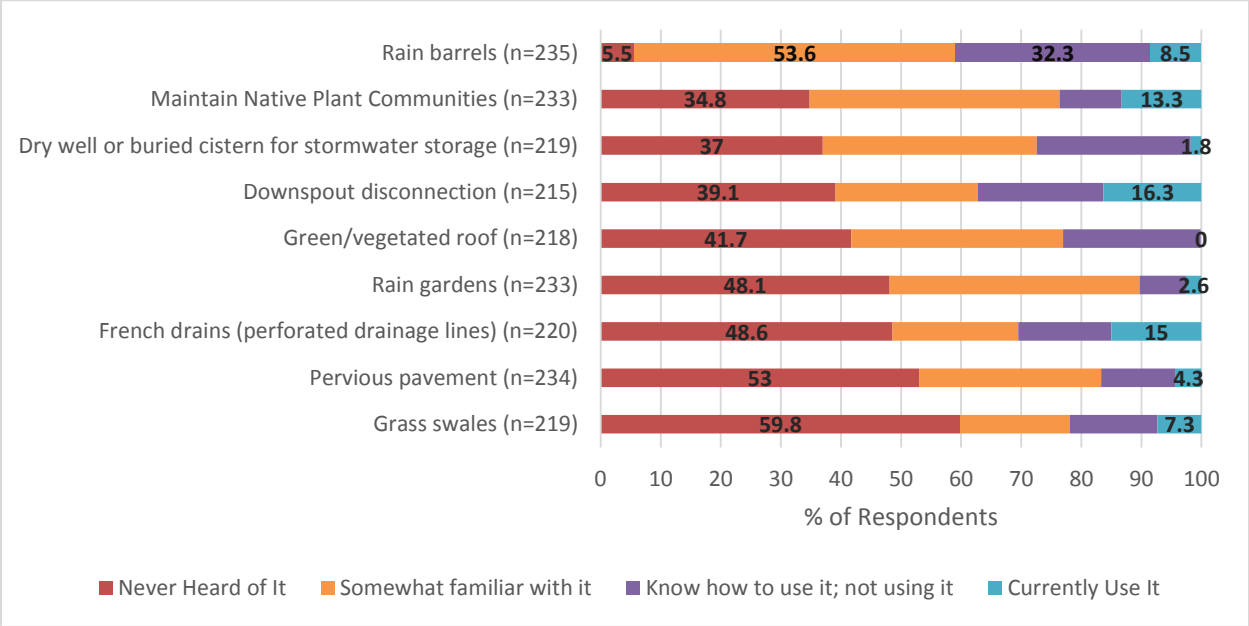

Figure 1 Urban Residents' Experience about BMPs

- From rain barrel adoptees' experience about Best Management Practices, excluding rain barrels and maintaining native plant communities compared to Urban Residents Survey (Figure 2), green/vegetated roof were ranked as the most familiar one, downspout disconnection was their least familiar one (51.5%, n=227).

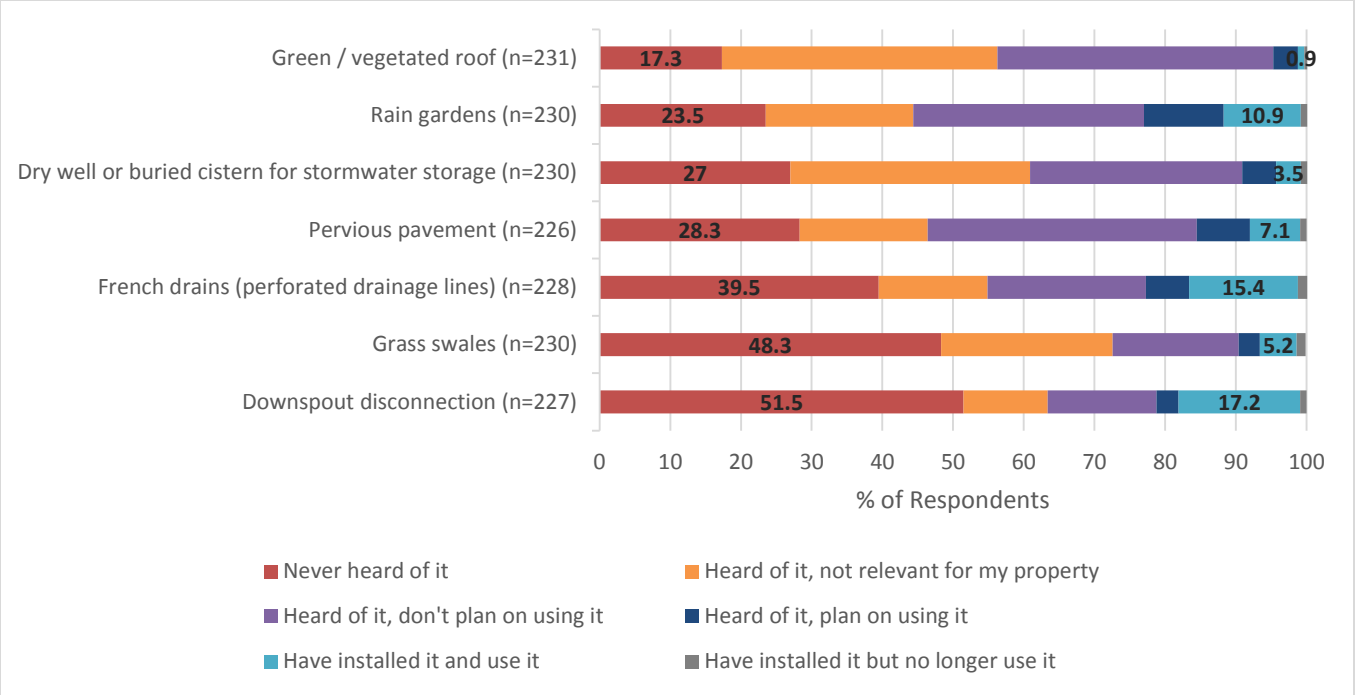

Figure 2 Rain Barrel Adoptees' Experience about BMPs

- Figure 3 shows urban residents' usage of water quality improvement practices, the percentage of respondents who installed rain barrel is 8.5% (n=235), ranked as 10th out of 16 practices listed.

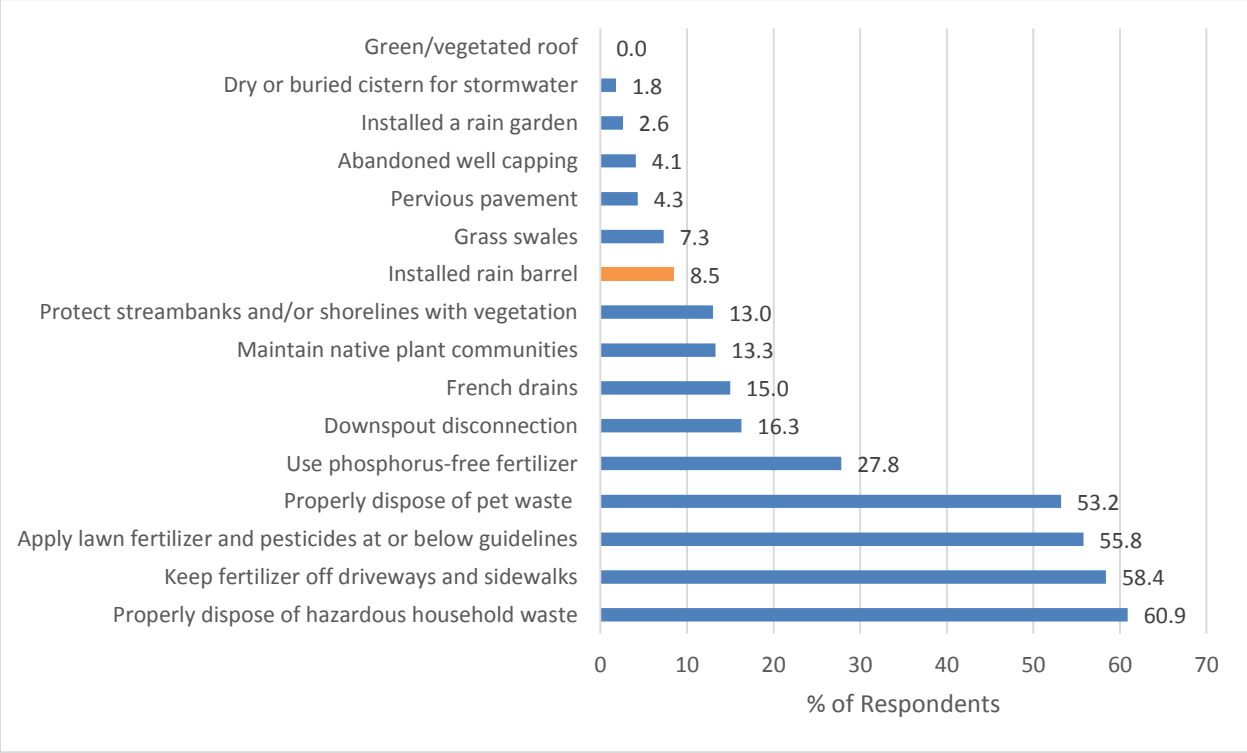

Figure 3 Urban Residents' Usage of Water Quality Improvement Practices

- Figure 4 shows Urban Residents' willing to use some of the Best Management Practices, 29.1% of respondents said they want to install rain barrels, ranked as the second of the listed four practices.

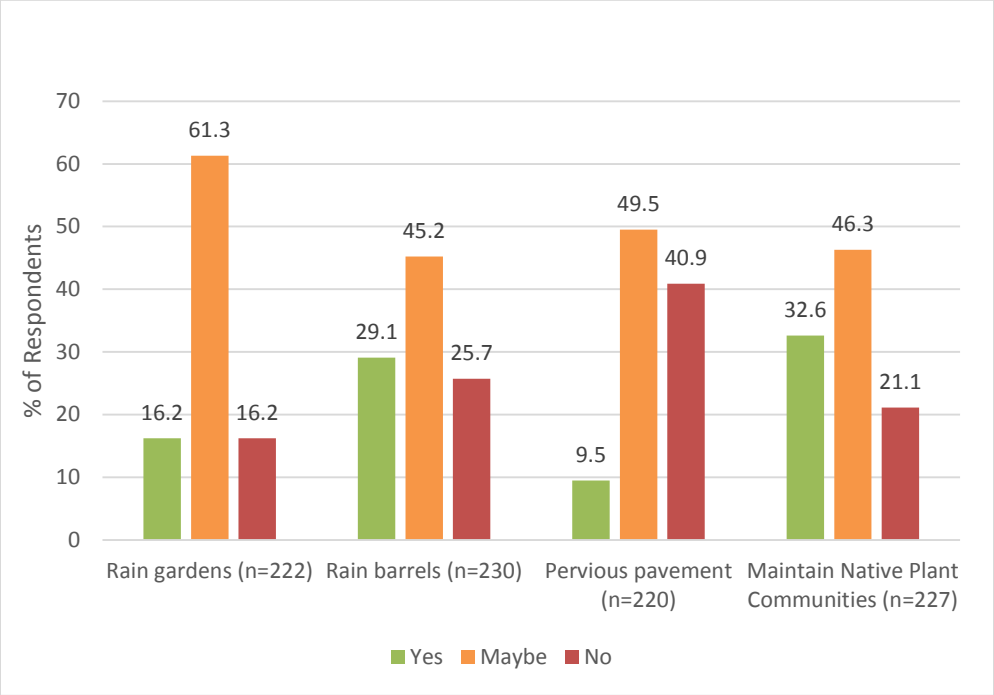

Figure 4 Urban Residents' Willing to Use BMPs

- Figure 5 shows the limitation urban residents recognized as the factor affected them to install a rain barrel. They identified cost (14.2%, n=225), desire to keep things the way they are (13.8%, n=225), and time required (12.9%, n=224) as the limitation affecting them to adopt the rain barrel.

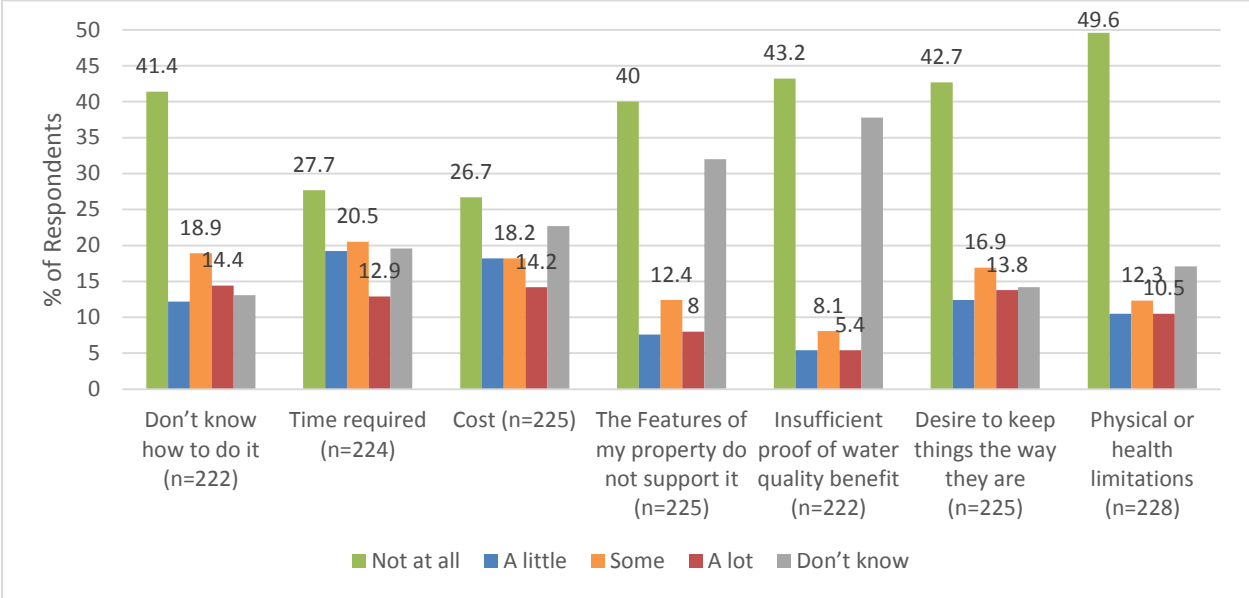

Figure 5 Urban Residents' Opinion about Limitation of Rain Barrel Adoption