HARRISON NEIGHBORHOOD WATER QUALITY SURVEY SUMMARY

Conducted by Metro Blooms in partnership with LUNE, LLC., Harrison Neighborhood Association, and the Bassett Creek Watershed Management Commission.

Funded by the Metropolitan Council

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Introduction

Harrison Neighborhood is one of the most culturally, racially, and economically diverse communities in Minneapolis. The neighborhood is on the forefront of a major economic boom spurred by transit investments and corridor development. It is located to the west of downtown Minneapolis within the Northside Achievement Zone (NAZ). A history of undesirable development in the neighborhood caused soil and water contamination. Concerns regarding health impacts of pollution have been raised.

Harrison Neighborhood Association was formally organized in 1984 to address neighborhood problems. Harrison neighborhood residents are civic stewards who have worked diligently to clean up a former superfund site, stabilize housing and support local businesses. The neighborhood association's partnership and the residents' ongoing commitments to address environmental issues and equitable development have been critical to achieving the health, social, and environmental challenges of managing urban runoff.

In order to manage this type of pollution, local governments are turning to citizens to manage stormwater on their property in order to minimize the polluted runoff that enters our storm drains. Metro Blooms has been working with cities, watershed districts, neighborhood residents, and businesses since 1983 to promote eco-friendly landscaping and educate citizens about the importance of stormwater management.

Metro Blooms began working with the Harrison Neighborhood Association and Bassett Creek Watershed Management Commission in 2016 on a project in this Near North neighborhood to engage residents and business owners in a project to prevent polluted stormwater from entering Bassett Creek and the Mississippi River. Bassett Creek is impaired, due to excessive chloride and bacteria (Minnesota Pollution Control Agency 303(d) impairment list). In order to meet local standards and reduce the negative impacts of urban runoff, the quality of water in Bassett Creek must be improved.

Metro Blooms is working with property owners in Harrison to manage their stormwater and improve water quality in Bassett Creek and the Mississippi River through the installation of boulevard bioswales. In addition to the environmental impact of these projects, Metro Blooms is working in partnership with Lune, LLC, Harrison Neighborhood Association, Bassett Creek Watershed Management Commission, and the Metropolitan Council to measure changes in knowledge, attitudes, and behavior related to water quality within the neighborhood. Qualitative data was gathered during the summer of 2017 (see Appendix I) to inform a neighborhood-wide Knowledge, Attitudes, and Practices (KAP) survey. The preliminary findings of the first round of the Harrison Neighborhood KAP survey are summarized in this report.

Methods

Metro Blooms contracted with Lune LLC to consult on a KAP study of the residents in the Harrison neighborhood during the summer of 2017. The University of Minnesota Water Resource Center has utilized the KAP method in more than 20 communities and has found the method to be comparatively quick and cost-effective. The Harrison neighborhood KAP study began with a series of qualitative survey activities, primarily short in-person interviews held at Blooming Boulevard Block Parties and Resilient Yard Workshops. Possible barriers to installing stormwater management practices on site and current resident knowledge were also discussed with Boulevard Captains and Blooming Boulevard participants. The qualitative data was then analyzed and utilized by Lune to inform the KAP survey questionnaire.

The questionnaire was then pre-tested and finalized. Lastly, a letter introducing the purpose of the survey, dates that the survey would take place, and confidentiality information was mailed to every single-family home and duplex in the Harrison Neighborhood (600 total). The pre-survey letter also gave residents the option to take the survey online through Survey Monkey before the door-to-door surveying began. The first-round KAP survey is attached as an appendix to this report as is the introductory letter.

The area of interest for this KAP study was the Near North Harrison neighborhood (Fig. 1).

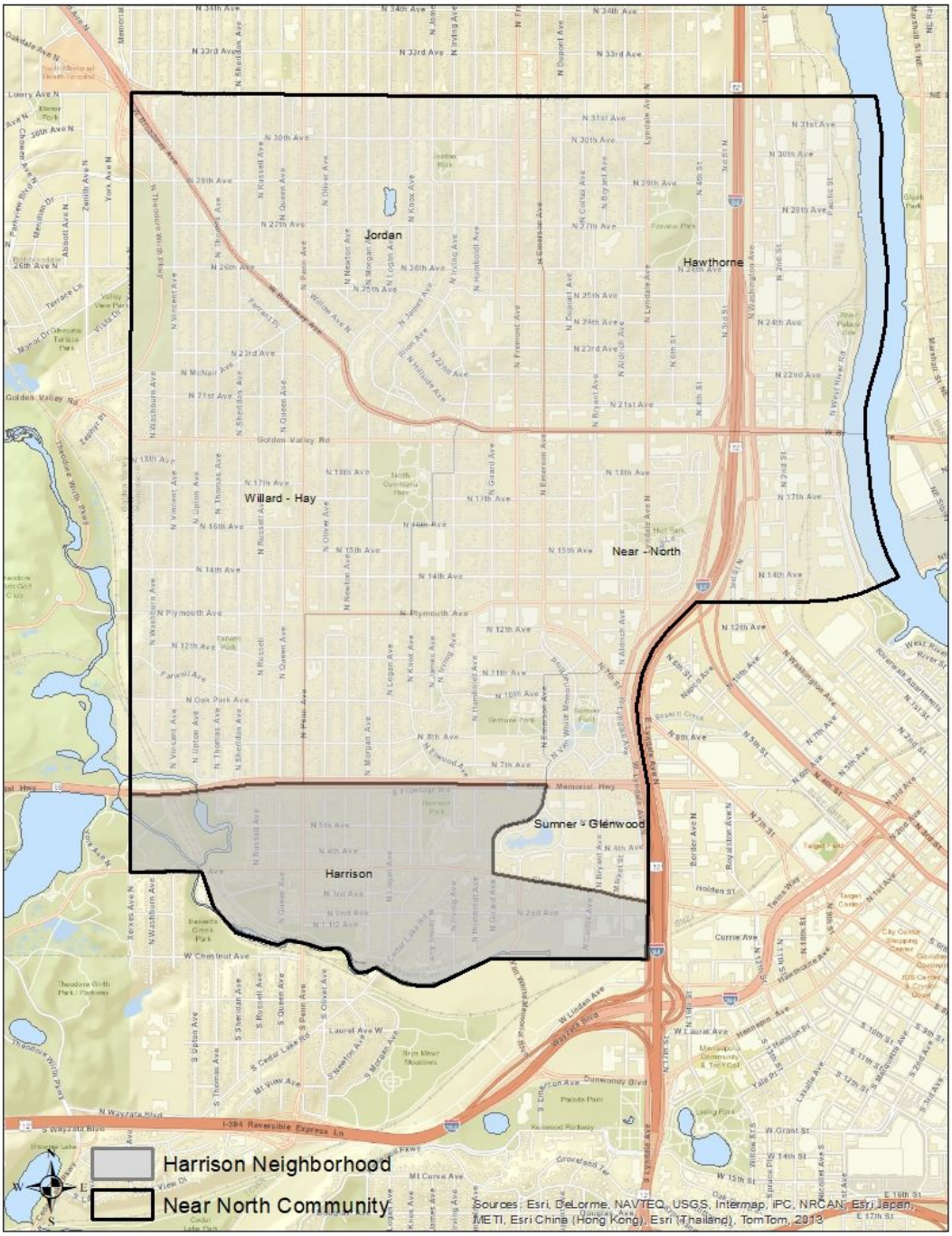


Figure 1. Outline of the study area of this KAP survey.

Jeff Mattson, Director of the Center for Urban and Regional Affairs (CURA) GIS department and Dave Colling, Executive Director, Harrison Neighborhood Association provided parcel data using ArcGIS. Businesses, apartments, and vacant homes were removed from the sampling frame because we wanted to target homeowners in the area. Because the total number of single family homes and duplexes in Harrison is only about 600, we decided to distribute the survey to every household. Following the pre-survey letter mailing, approximately 15 homes were taken out of the sample due to vacancy.

Metro Blooms learned through the Nokomis KAP study experience that hiring doorknockers and administering surveys in person was not an effective use of time and resources.

Therefore the introductory letter was mailed and survey packets were delivered to Harrison neighborhood residents by Metro Blooms staff. Each packet contained a survey, a self-addressed and stamped envelope, and a note describing the survey and providing contact information for questions. Residents were also given the option to take the survey online through Survey Monkey (Appendix II).

18 residents took the survey online, and 15 homes were removed from the sample due to vacancy, reducing our door-to-door sample to 567 households. After one month, we received a total of 97 responses, for a 17% response rate.

Results

The knowledge questions in the Harrison KAP survey were meant to gauge residents' knowledge about stormwater runoff and its effects, but also about the primary causes of runoff pollution in the neighborhood. The first knowledge question of the KAP survey (Q6) examined participants' knowledge of primary source of pollution to surface waters.

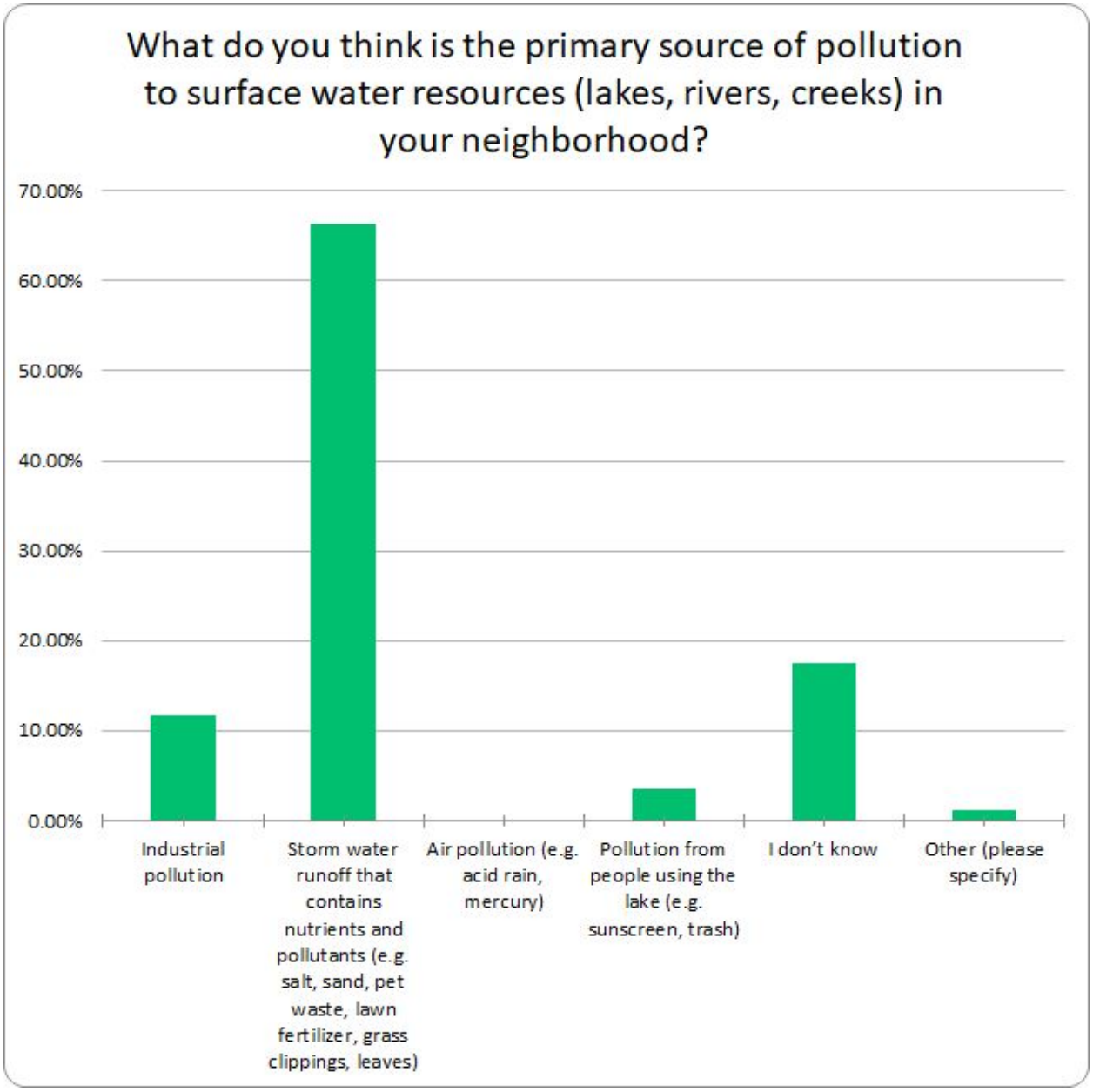


Figure 2. Harrison neighborhood resident knowledge about the primary source of pollution to surface water resources.

The majority (66%) of participants surveyed recognize that stormwater runoff containing nutrients and pollutants is the primary source of runoff pollution, but 17% said they didn't know, and another 12% believed industrial pollution was the primary source.

The next knowledge question (Q8) asked residents about the impacts of their yard care activities on water quality.

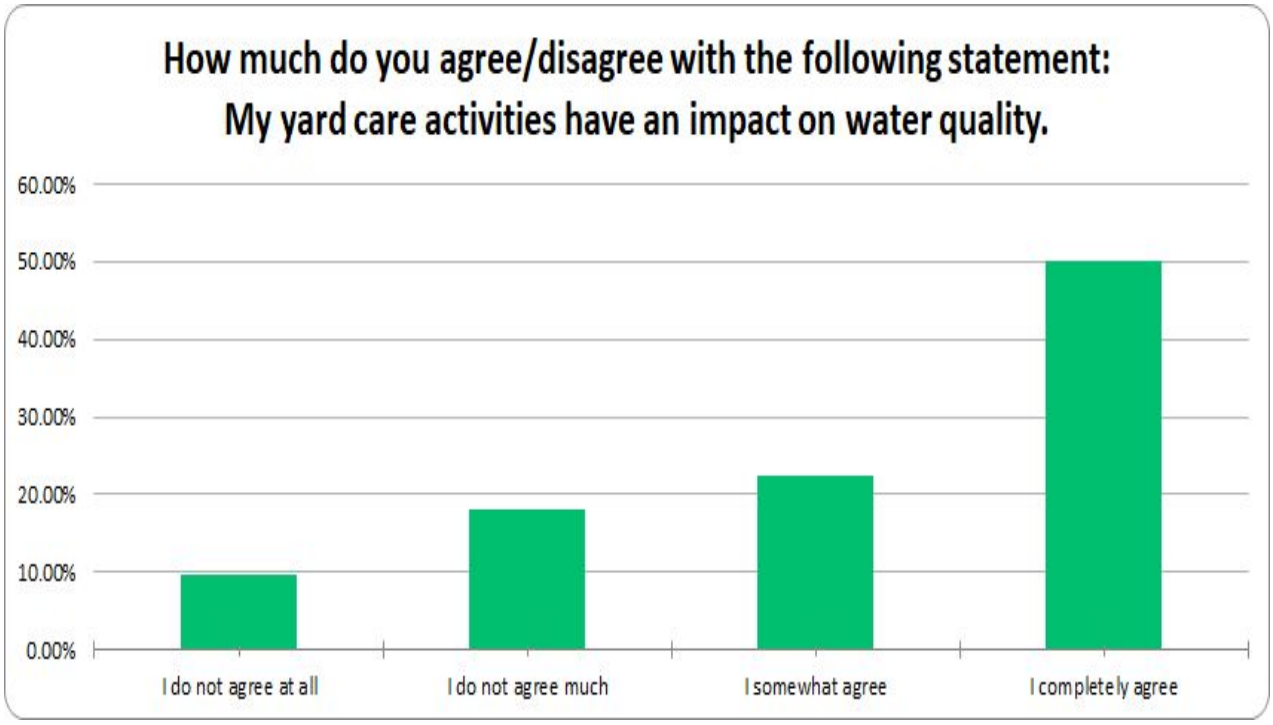


Figure 3. Harrison neighborhood resident knowledge about the impact of their yard care activities on water quality.

47 of the participants surveyed completely agreed with the statement: My yard care activities have an impact on water quality. 21 somewhat agreed and 26 residents did not agree much or at all with the statement. This result may be due to the fact that many are practicing yard activities that reduce the environmental risks of urban runoff.

The attitude questions in the KAP survey revealed residents' concerns about water quality and their beliefs about who is responsible for it as well as who they trust as a source of environmental information.

Most residents (64%) are either very concerned or fairly concerned about the water quality in their neighborhood (Q5). This shows us that they recognize the issue, although many people (36%) also expressed little to no concern at all about water quality in the neighborhood.

Participants were also asked about who they believed should be responsible for maintaining clean water in their neighborhood (Q7). Respondents were allowed to "circle all that applied" and while the vast majority (83%) said the City of Minneapolis should play a part, 71% believed neighborhood residents were responsible. Bassett Creek Watershed Management Commission (BCWMC) was third (68%) and local businesses came in fourth (66%) (Fig. 5). The number of respondents who reported that BCWMC should play a part shows us that most

people know what BCWMC is and what they do, showing a relatively high knowledge in the community about local government and water quality.

Figure 4. Harrison residents level of concern about surface water in the neighborhood.

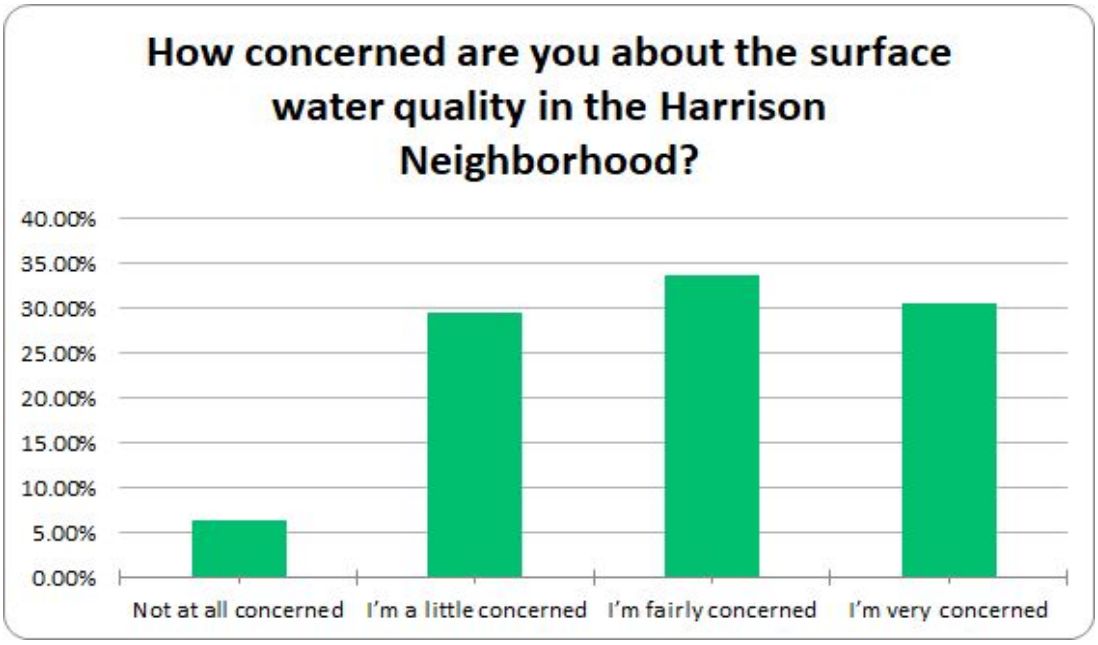


Figure 5. Attitudes about responsibility for maintaining neighborhood's clean water.

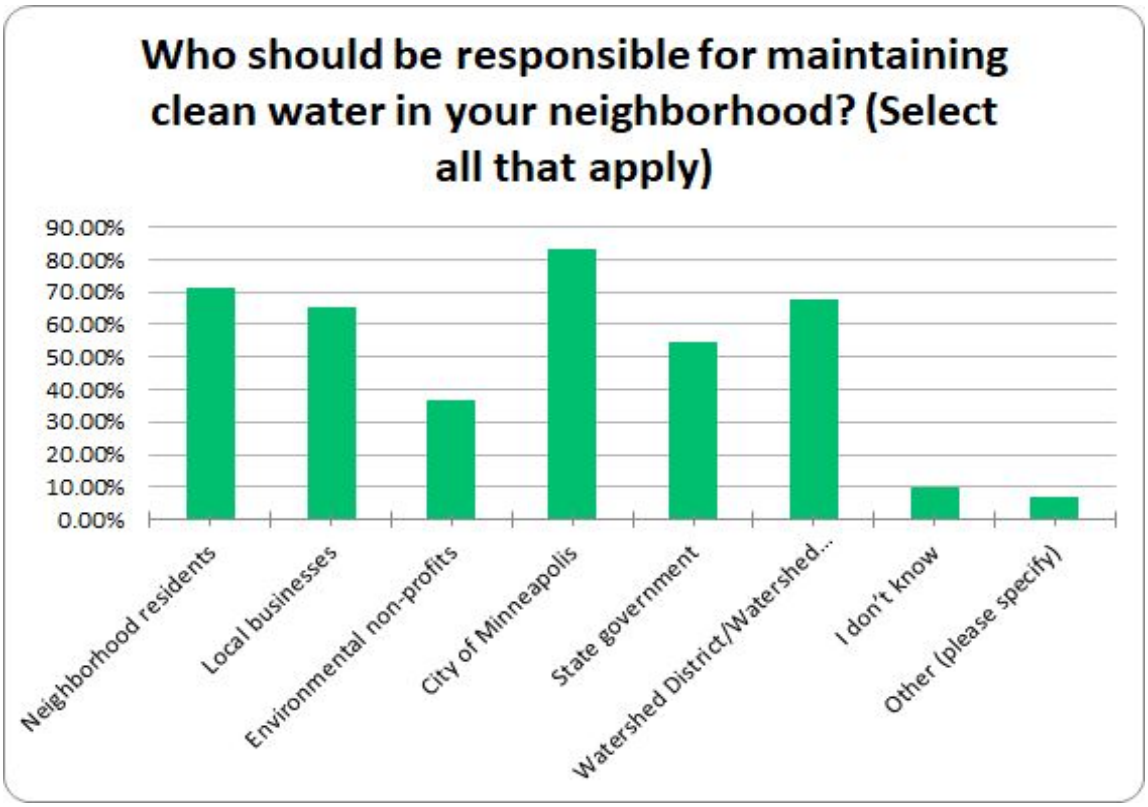
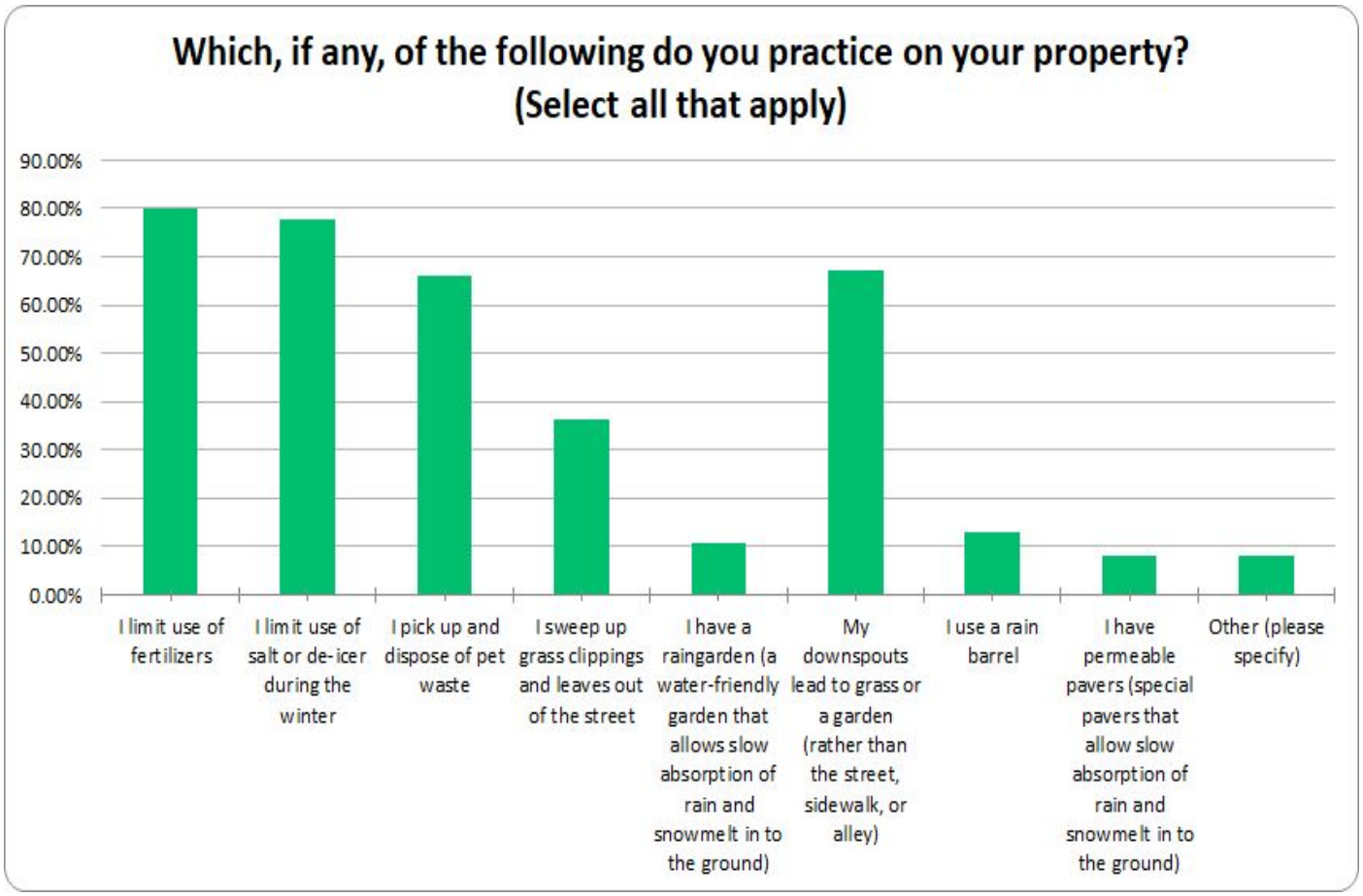


Figure 6. Practices that Harrison residents currently practice on their property.



A significant number of survey respondents are implementing clean water practices as part of the landscape routine. 78% are limiting the use of salt or de-icer during the winter, 80% are limiting the use of fertilizer, and 66% report that their downspouts lead to grass or a garden (rather than the street, sidewalk, or alley). These actions reduce the amount of nutrients and pollutants being distributed by urban runoff and demonstrate an attitude of personal responsibility

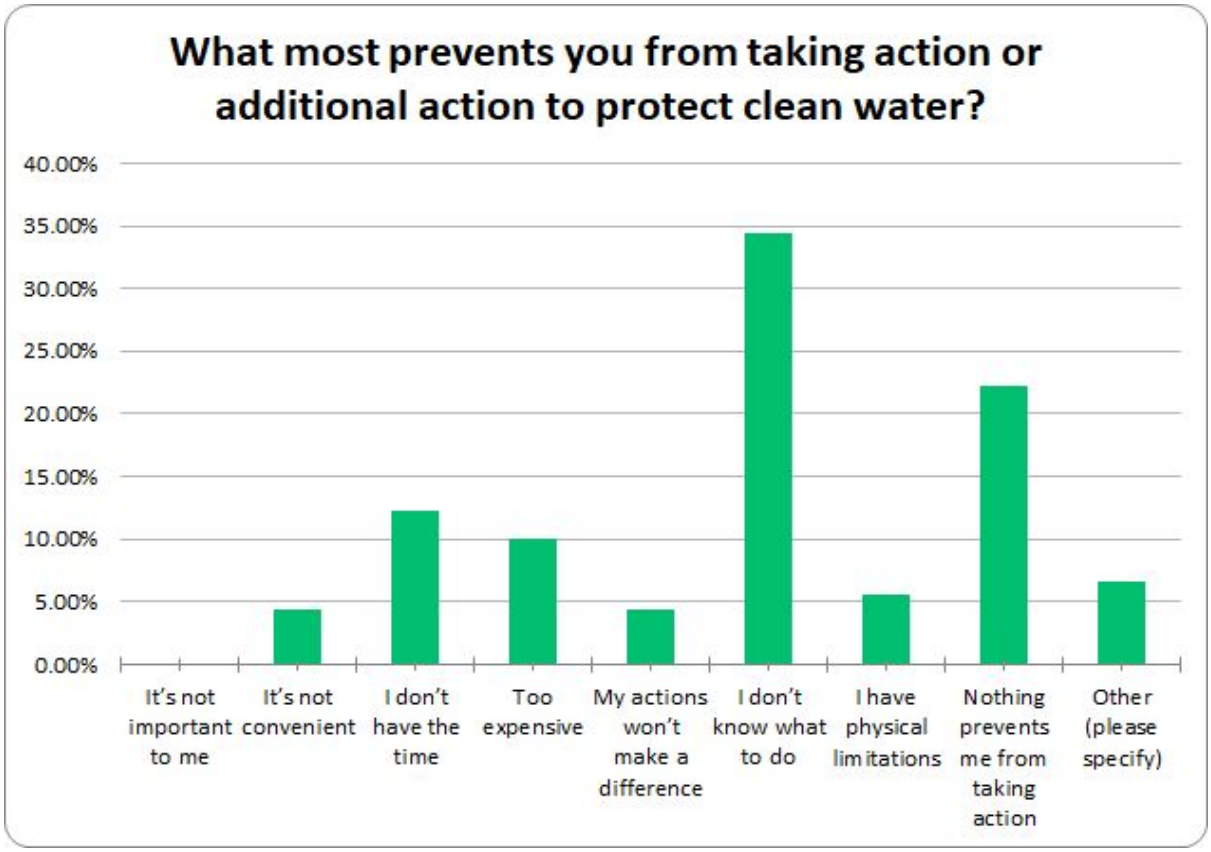


Figure 7. Barriers identified by residents that prevent them from taking action to protect water quality (Q15).

In contrast, based on the results obtained in this survey Metro Blooms learned that 33% of respondents did not know what action to take to protect clean water.

Conclusions

Harrison Neighborhood Association's website states that "their neighborhood is one of the most culturally, racially, and economically diverse communities in Minneapolis. Harrison residents have built a rich history of art, creativity, and resilience. Local businesses have built a strong community of investment and possibility. We stand at the crossroads of opportunity and equity". http://www.hnampls.org/

In general, the Harrison neighborhood stakeholders who completed our survey were mostly homeowners (73%) who seem to be aware of stormwater runoff issues and how they connect to their yard care practices.

However, when you look at the Wilder Foundation Minnesota Compass project report compiled about Harrison neighborhood, you will find demographic information that indicates that more than 50% of people who reside in the neighborhood are renters and people of color. http://www.mncompass.org/profiles/neighborhoods/minneapolis/harrison#

Eighteen percent of the participants surveyed for this report indicated that they were renters (Q18). 84 participants out of 97 provided demographic information (Q23) through which we learned that 86% described themselves as White, 11% described themselves as Black, 6% described themselves as Asian, 4% described themselves as being of Hispanic, Latino, or Spanish heritage, and 1% described themselves as Native American or Alaska Native. 13 did not respond to this question.

We recognize a need to integrate new equity mechanisms that increase access and opportunities for renters and people of color to participate in our clean water initiatives. Many renters do not have the authority or capacity to make landscaping decisions about the property. We learned that this was a major barrier for renters in Minneapolis Public Housing Authority (MPHA) scattered site housing properties in the neighborhood.

In addition to a high number of renters in the neighborhood, another possible reason for very few installed best management practices in Harrison is the perceived expense of installing such practices. Forty-six (58%) residents indicated that funds to help offset costs would help them take action on their property to protect clean water.

Neither the City of Minneapolis nor Bassett Creek Watershed Management Commission (BCWMC) have local cost share programs for private property owners. Exploring cost-effectiveness of other cities' cost share programs and tracking the environmental impacts of empowered stakeholders taking action to protect clean water resources could inform consideration. We would encourage these units of local government to expand the benefits of water investments more equitably to be more inclusive of all residents, especially renters and people of color, so that they can also take clean water action in their neighborhood. We also encourage these governmental units to continue to invest in building the capacity of non stormwater professionals to address environmental risks in their communities.

The education gap for all residents seems to be between recognizing the need for healthy lawn care practices that protect clean water resources and having the capacity and knowledge to implement them. Metro Blooms and partners began addressing this education gap through the Blooming Boulevards demonstration installation at Redeemer Lutheran Church, by distributing informational pamphlets, and encouraging residents to attend do-it-yourself workshops and participate in the Northside Neighborhood Engagement & Opportunities in

Clean Water Initiatives (NNEOCWI) project. Thirty-seven property owners have since installed Blooming Boulevards in the neighborhood and a minimum of 6 commercial and institutional business owners will have the opportunity to participate in the project as well.

Many more residents in the neighborhood have expressed interest in participating in the Blooming Boulevards program. Fifty-five (71 %) survey participants indicated they would be willing to add a Blooming Boulevard to their yard care activities (Q16). This presents a great opportunity for community resilience and clean water education and action; to show residents how they can address environmental risks by implementing practices on their own property.

References

APPENDIX I

Minnesota Compass-Harrison Neighborhood
http://www.mncompass.org/profiles/neighborhoods/minneapolis/harrison