

# ENGAGING COMMUNITIES IN STORMWATER SOLUTIONS: LESSONS FROM EDMONSTON, MD



## PALS SHOWCASE 2025

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**Course:** URSP372: Diversity and the City

### INTRODUCTION

Edmonston is a town located in Prince George's County in Maryland. The town has a diverse population of about 1,617 residents, including 59,43% Hispanics or Latinos and 24,48% Black or African American (U.S. Census Bureau, 2022). The town faced several flooding events, the two most recent in 2020 and 2022. The town is particularly interested in understanding the challenges and barriers faced by the community during flood events and residents' perceptions and interest in applying flood mitigation strategies in their homes.

### OBJECTIVES

- Develop a community-based research approach that builds students' technical skills and knowledge about the environmental and social aspects of Edmonston.
- Develop a survey that covers residents' experiences and perceptions, the local context of the city and current challenges faced by communities.
- Propose actionable, informed, and community-centered recommendations to address the city's flooding challenges.

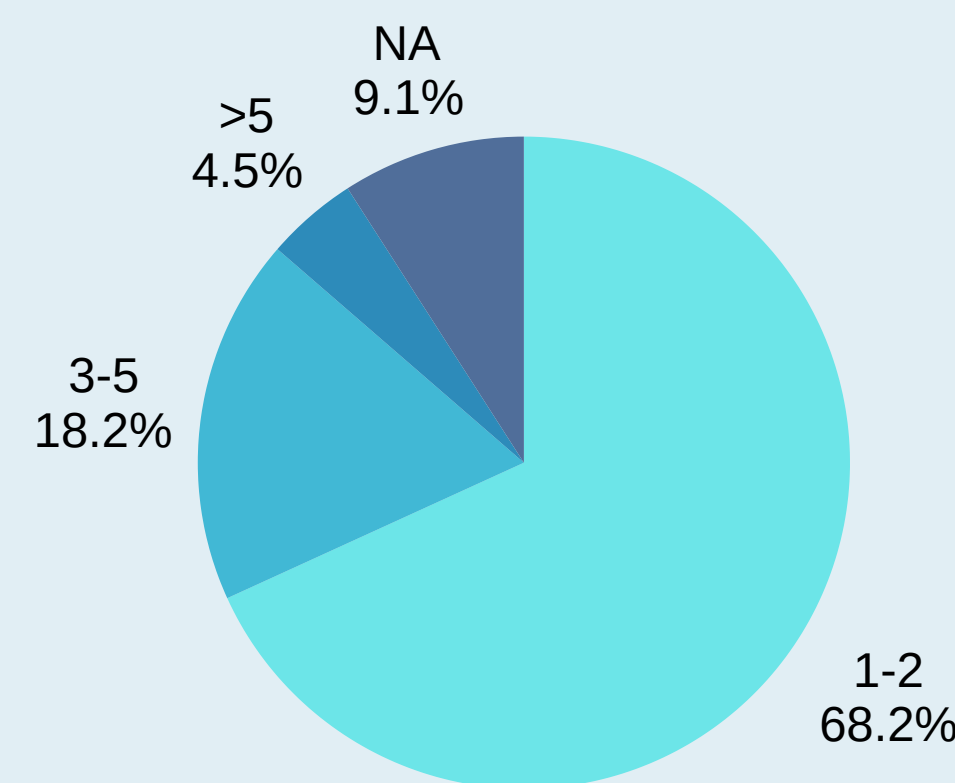
### METHODS

- **Phase 1:** Developing survey questions.
- **Phase 2:** Technical visit
- **Phase 3:** Survey Application in Edmonston, MD. 22 students applied a 35-question survey and visual inspection tool with 22 community members. Surveys were translated in English and Spanish.
- **Phase 4:** Analysis and Recommendations.
- **Phase 5:** Reporting back to stakeholders.

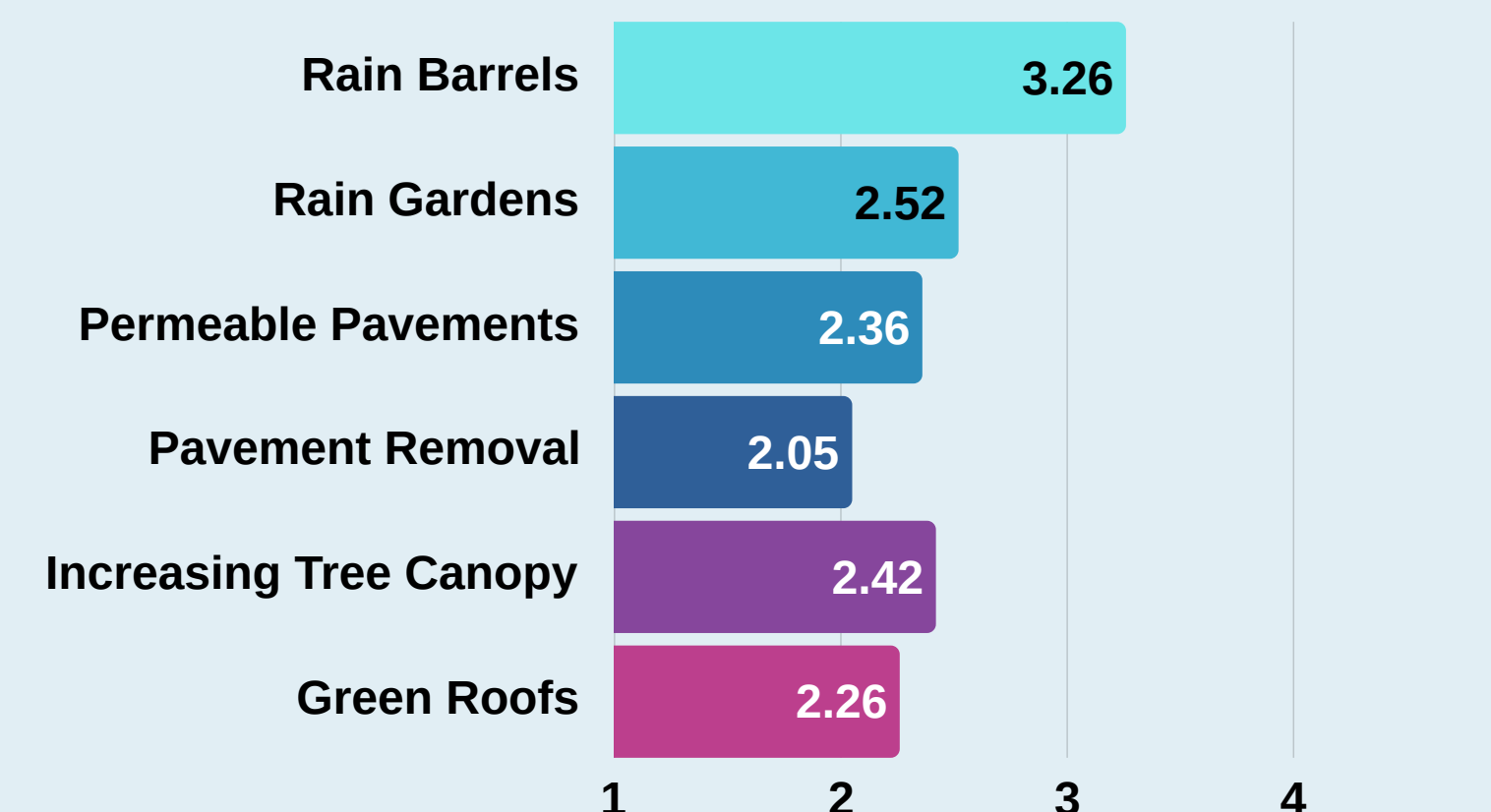


### RESULTS

**How many flooding events have you experienced in your current home?**



**Average Perception on Effectiveness of Mitigation Strategies**

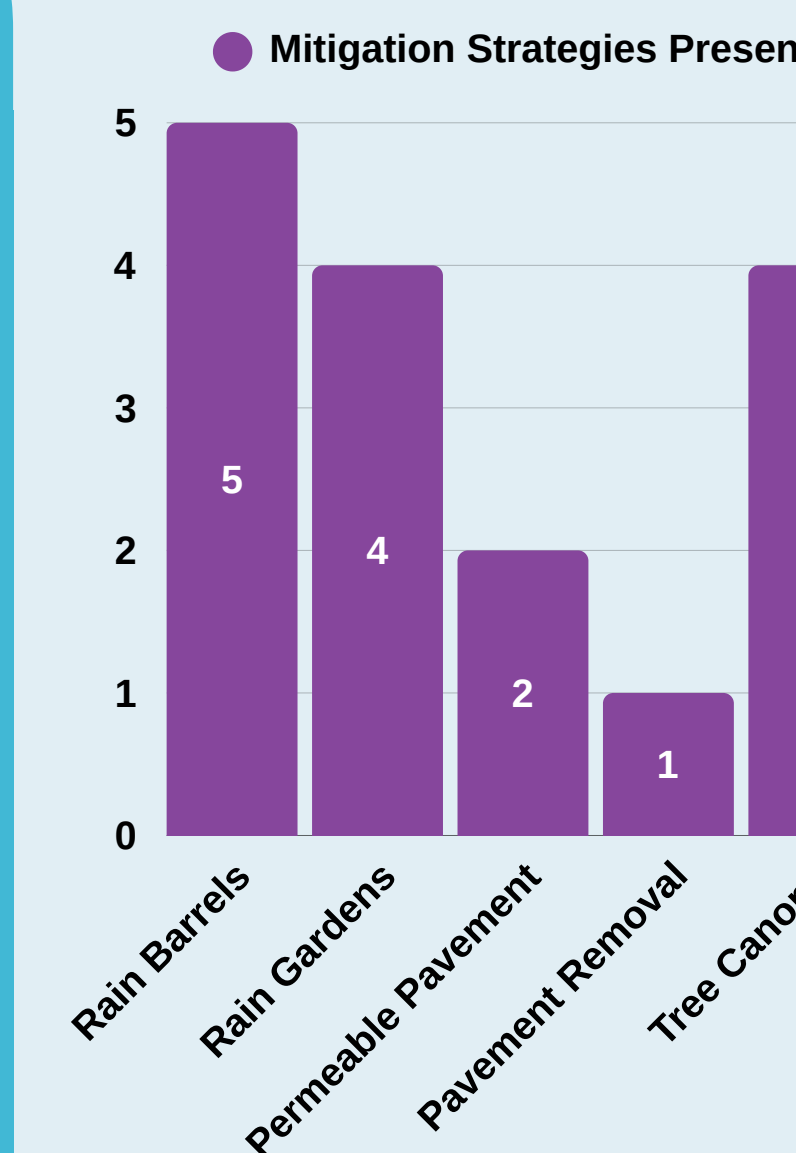


- 7 residents (31%) never reported any flood event to the city or any other institution,
- 16 residents (72%) classified the flooding as stormwater and not as sewage flooding,
- In a scale from 1 to 5, participants are more interested in implementing rain barrels (average of 3.26) and least interested in having pavement removal (average of 2.05) for mitigating flooding in their homes.

### CONCLUSIONS

Through surveying and collecting data in Edmonston, it became clear that while many residents express interest in flood mitigation strategies, significant gaps remain between interest, awareness, and actual participation. Addressing these gaps will not only increase participation in flood mitigation efforts but also promote environmental justice, adaptation and equity across the community. For that, this study has three main recommendations:

- 1 - Encourage Residents to Participate in the Process of Flood Mitigation
- 2- Diversify Community Outreach Methods: Create Bilingual Education Campaigns for Stormwater Mitigation
- 3 - Host a Town Hall Forum or Workshop: Promote Conversations About Flood Mitigations
- 4 - Establish Resources Webpage and/or Pamphlets: Flood mitigation programs and potential mitigation solutions.



- Only 2 residents participated in the Port Towns Watershed Program (33.33%), and 1 in PG's Rain Check Rebate Program (16.67%),
- The main reasons for not engaging in the programs are unfamiliarity (40.91%), lack of interest (22.73%), time (18.18%), money (13.64%), ineligibility (4.55%).

### ACKNOWLEDGMENTS

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