Urban Water Values in the Twin Cities Metro Area

Findings from community-centered research

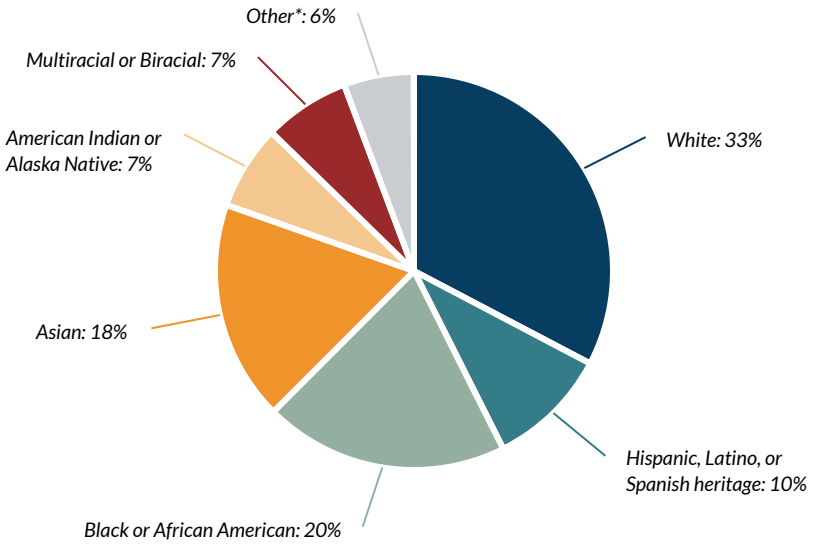
One central goal of this research is to understand and uplift marginalized voices and communities that often are under-represented in water science, policy, and management. In this project, researchers from the University of Minnesota's Center for Changing Landscapes in collaboration with the Metropolitan Council and community partners administered onsite surveys at 14 community events across the Minneapolis-St. Paul Metropolitan Area (MSP) in 2023 to better understand water relationships in socially and culturally diverse communities.

Inclusive research methods

Exploring water relationships in urban areas requires a critical examination of the marginalization of residents and communities across socio-cultural variables such as income, race, and ethnicity. In the 7-county MSP, historical and systemic institutional racism has had cascading social, cultural, and ecological consequences that are still evident and felt today (Davenport et al. 2023, Walker et al. 2023). Water science, policy, and management has the potential to acknowledge and address disparities by centering communities and prioritizing inclusion and representation of socially and culturally diverse voices. Social science research supports representation justice in water policy and management by engaging community members in culturally meaningful ways across diverse water relationships and experiences.

Our team's approach applies multiple participatory research methods to gather water narratives, including this survey of MSP residents' water values, beliefs, concerns, and actions. In this study, we aimed to engage and represent voices of residents who identify as Black, Indigenous, or People of Color (BIPOC) through inclusive research designs. By meeting residents face-to-face in their own communities, hiring multi-lingual field staff, and providing a small cash incentive for participants, our study engaged 1,052 community members, 67% who identify as BIPOC, and documented diverse water relationships.

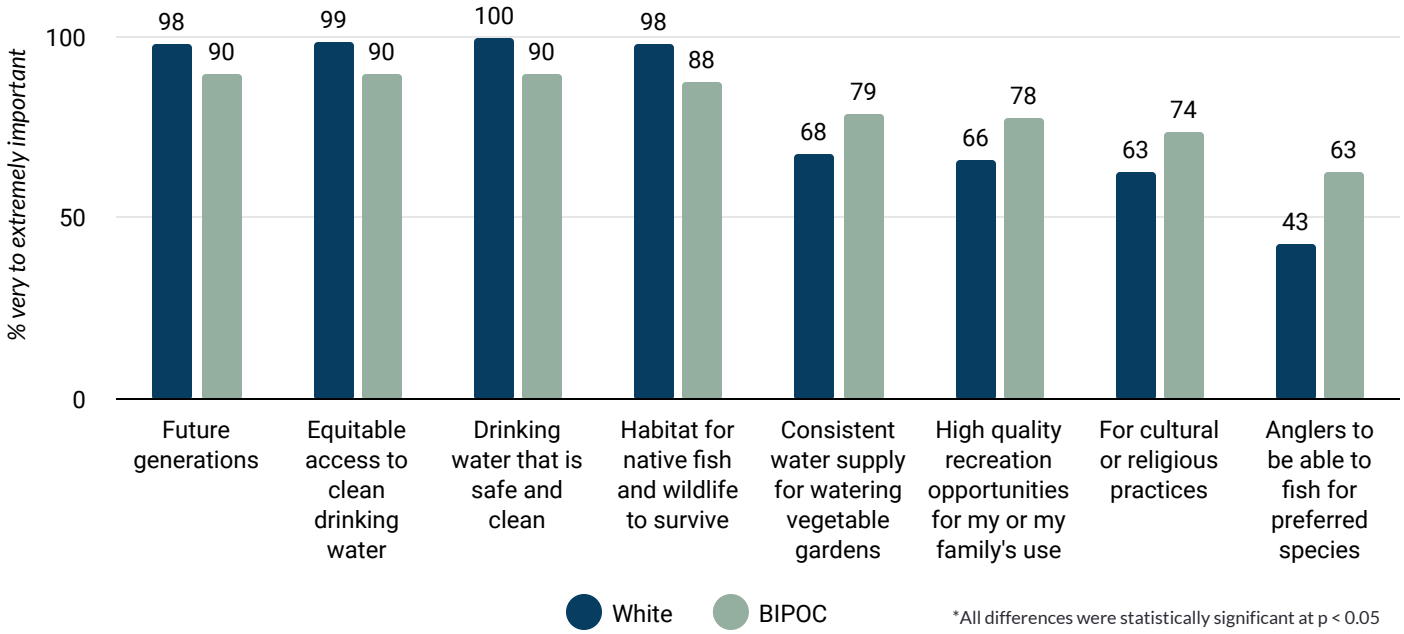
Racial and ethnic identities of survey respondents



*remaining 6% comprised of Middle Eastern or North African, Native Hawaiian or other Pacific Islander, or a race, ethnicity or heritage not listed here

How do MSP residents value water?

*How important to you is it to protect lakes and rivers for the following water values or uses?**



*All differences were statistically significant at $p < 0.05$

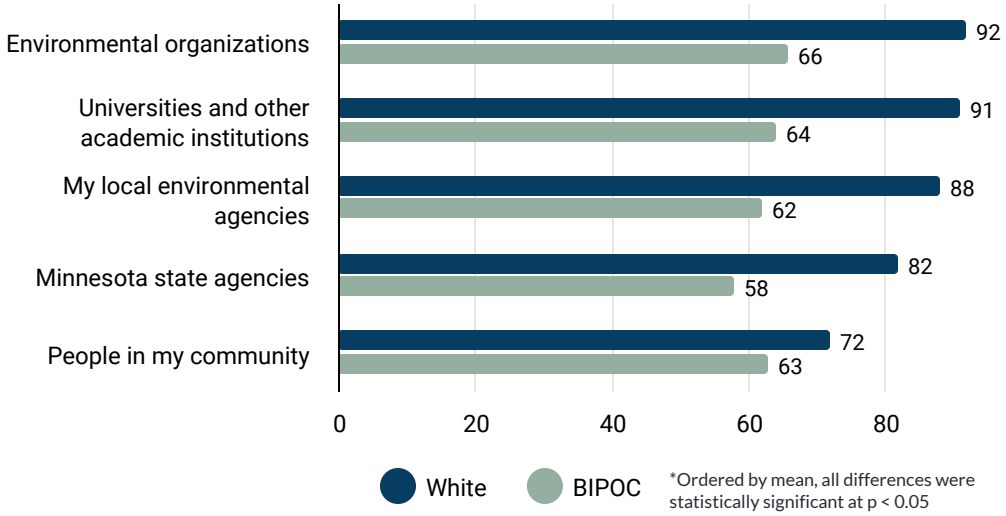
Who drinks water from the tap?

% respondents who drink water from the tap by racial/ethnic identity

- **49%** Black or African American
- **60%** Asian
- **64%** Hispanic, Latino, or Spanish heritage
- **72%** American Indian or Alaska Native
- **93%** White

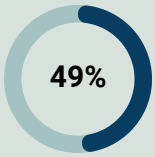
Who do MSP residents trust for information about water?

*% somewhat to strongly trust**

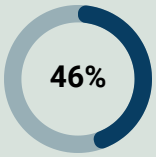


*Ordered by mean, all differences were statistically significant at $p < 0.05$

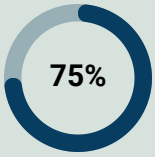
Disparities in water access



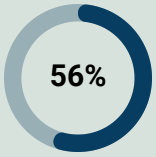
49% of BIPOC respondents trust that their tap water is safe to drink
(compared to 77% of White respondents)



46% of BIPOC respondents worry about the safety of their drinking water
(compared to 19% of White respondents)



75% of BIPOC respondents have reliable access to drinking water
(compared to 93% of White respondents)



56% of BIPOC respondents are concerned about adequate water supply at home
(compared to 41% of White respondents)

Lessons Learned

Water relationships vary significantly across social and cultural groups in MSP

This awareness and understanding should guide all water planning and projects, including water restoration, protection, and stewardship.

Research methods matter

Community-centered research yields more representative samples and produces more inclusive research findings.

Access to drinking water is an environmental justice issue

Accessing and trusting clean and safe drinking water is more complicated, costly, and challenging overall for Black residents, Indigenous residents, and other residents of color living in MSP than it is for White residents.

Solving the water crisis...

is less about helping communities understand water and more about helping water professionals understand communities and how to work in partnership with communities in ways that acknowledge, include, and represent diverse water relationships, experiences, and values.

Acknowledgements

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