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“My community never drinks water from the tap:” A study of public trust and household water insecurity

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Abstract

While U.S. urban water systems are classified as "safely managed," psychological and social barriers create significant disparities in actual use of tap water. This study investigates household water insecurity (HWI) in the Minneapolis-St. Paul Metropolitan Area, shifting focus from physical infrastructure to the psycho-social and cultural dimensions of water acceptance. In this study, researchers at the University of Minnesota surveyed over 1000 residents in their communities, prioritizing representation from BIPOC, low-income, and renter communities using culturally inclusive methods. The study found that Whiteness and wealth were the strongest predictors of trust in tap water, and that White participants were more likely to drink tap water and trust its safety than other groups. In contrast, Black, American Indian, and lower-income residents reported higher levels of worry and lower trust in government water information. Findings from this study show that physical access to water is not adequate as a metric for water security. To achieve equity, water institutions must address the distrust of public systems through representative leadership and culturally relevant engagement.

Article Highlights

- Used onsite community events to reach 67% BIPOC participants.
- White residents are six times more likely to drink tap water.
- BIPOC groups lack trust in the government for water information.
- Renters are 50% less likely to like tap water taste than owners.

Introduction

Access to clean and safe drinking water is a human rights challenge that continues to persist globally. A reported 2.1 billion people lack physical access to systems that provide safe and reliable drinking water (World Health Organization (WHO) and United Nations Children's Fund (UNICEF) 2025). Despite advances in distribution and accessibility, WHO and UNICEF report that water security disparities continue to exist, vary across sociodemographic characteristics, and put certain communities at greater risk of microbial contamination and disease. For example, Sub-Saharan Africa has made significant strides in "safely managed" drinking water systems over the last decade to reach only 52% coverage in urban areas. For many residents in low-income or roadless regions, members of certain systemically disadvantaged social or cultural groups (e.g., women and girls, Indigenous peoples), and people with disabilities, safe water for drinking, cooking, and cleaning is out of reach. Global climate change further exposes these communities and water systems to drought, flooding, and heatwaves that amplify contamination risk and barriers to access. Globally, examining access to safe drinking water and other water services (e.g., sanitation and hygiene) has provided a window into persistent social inequities, environmental injustices, and public health crises. However, household water insecurity (HWI) researchers have criticized an overreliance on physical access to water as a measure of water security

(Wutich et al. 2017; Miller et al. 2020), arguing for more nuanced research that acknowledges the social, cultural, and governance dynamics influencing HWI.

In the U.S., 97% of the nation's urban drinking water systems are considered safely managed (WHO and UNICEF 2025). Only Australia and New Zealand have more complete urban drinking water systems at 99% coverage. The Safe Drinking Water Act of 1974 regulates U.S. public water systems to reduce contamination and health risks associated with drinking water supplies. Inequities in physical access to safe, accessible, and affordable water systems continue to exist, though predominantly in rural settlements and for private well users across gradients of groundwater contamination and quality of household well systems. In urban systems, emerging contaminants like per- and polyfluoroalkyl substances (PFAS) and legacy contaminants like lead in service pipes from the supplier to the tap have raised concern and health risks in urban communities, prompting new EPA rules that hasten identification and replacement of lead and copper pipes in public water systems (Pieper et al. 2018).

In this paper, we examine household water security and insecurity from a psycho-social and cultural perspective, rather than a purely physical perspective (Wutich et al. 2017). We propose that understanding HWI in urban communities provides a window into access through mechanisms such as risk perception, public trust, and persistent systemic social inequities. Our research in the Minneapolis-St. Paul Metropolitan Area (MSP) reveals disparities across multiple measures of acceptance of household drinking water across social and cultural measures of difference. In this paper, we present those findings and implications for water science and policy.

Water, Whiteness, and Wealth

Previous research in the U.S. and in MSP suggests that socio-economic and cultural variables matter when it comes to how people relate to and engage with the natural environment and environmental planning processes (Pradhananga et al. 2019; Davenport et al. 2023; Walker et al. 2023). In the past two decades, researchers have increasingly investigated the psychology of household drinking water "acceptance" among residents for whom household or public drinking water and water services are deemed by professionals as "safely managed." Trust in household drinking water (i.e., tap water) has become an important area of research, as distrust in tap water and substitution of alternatives (e.g., sugar-sweetened, non-nutritious, or caffeinated beverages) are linked to public health problems (Ogden et al. 2012; Rosinger 2022), economic burdens (Javidi & Pierce 2018), and increased environmental stress caused by the production and waste of single-use packaged water and other beverages (Onufrak et al. 2014). Dehydration is linked to multiple mental and physical health problems (Rosinger et al. 2016) in people of all age groups.

Drinking water risk perception is a multi-dimensional construct, having cognitive, affective, and comparative elements (Brouwer et al. 2020; Grupper et al. 2021). Brouwer and others (2020) surveyed water customers in the Netherlands and observed high levels of trust in tap water overall, with slight differences across social variables such as gender, education levels, and presence of children at home. Male-identifying, highly educated, and respondents without children at home had lower concern about

water quality than their counterparts. In follow-up interviews and focus groups with water customers, researchers noted that “institutional trust” was a core theme explaining trust in tap water. Institutional trust reflected a positive image of water supply companies in the news media, institutional transparency, and the availability of information. Grupper et al. (2021) linked acceptance of tap water as a drinking water source among majority non-Hispanic White Roanoke, Virginia (USA) residents to risk perception, including measures such as trust in utility providers, organoleptic evaluations (i.e., smell, taste, appearance), and salience of water quality issues in the region. The authors did not examine racial/ethnic identity as an influencer and reported no difference in acceptance across income levels.

Relatively few studies have examined the role of race/ethnicity and income on perceptions of household drinking water and trust in water suppliers. Pierce and Gonzalez (2017) used the 2013 American Housing Survey to investigate views of public drinking water supply and determined that drinking water perceptions are more strongly influenced by socio-cultural variables (e.g., education, income, race/ethnicity, and country of birth) than by physical variables (e.g., housing unit age/quality). For example, non-Hispanic White respondents born in the U.S. were more likely to perceive their water supply as safe than Hispanic, Black, or immigrant respondents. In contrast, almost one-third of immigrants from Latin American countries did not perceive their water as safe for drinking. More recently, Park et al. (2023) found that 15% of adult Americans surveyed nationwide did not think their household tap water was safe to drink and 26% did not think their tap water tastes good. Respondents who were younger, Hispanic or non-Hispanic Black, lower income, and renters were more likely to have negative perceptions of their tap water than their counterparts. A survey of clients attending public health centers in Los Angeles County, California (USA), found that only 48% of participants reported drinking tap water (Family et al. 2019). The researchers identified several variables with significant effects on not drinking tap water, including education and age. More educated and older participants were more likely not to drink tap water than less educated and younger participants. Female identifying participants were more likely not to drink tap water than male participants. Race/ethnicity was not a significant predictor in this study.

Not having confidence in household tap water is linked to higher intake of bottled water and higher odds of consuming sugar-sweetened beverages (Rosinger 2022). A recent review study examining tap water substitution behaviors identified the perceived safety of “non-packaged water” (NPW) as the most common variable influencing beverage selection. For those who viewed NPW as unsafe or insufficient, treatment or filtration and water testing were common adaptive strategies (Ewoldt et al. 2025). In a statewide telephone survey of Georgia residents, Abrahams et al. (2000) determined that “non-White” and younger survey respondents were more likely to use bottled water than were White and older respondents. The researchers further estimated, using 1997 population data, that Georgians spent $293 million annually on bottled water.

Given that dehydration and substitution of sugar-sweetened drinks have been linked to increased public health risks and economic burdens, acceptance of tap water as a drinking water source has become a critical public health and socio-economic wellbeing indicator. Altogether, studies indicate that risk perception and institutional trust are important determinants of tap water acceptance as a drinking

water source. More recent work points to important differences in risk perception and tap water drinking behaviors across socio-cultural variables of difference, such as age, education, race/ethnicity, immigrant status, income, and home ownership status. While traces of the effects of Whiteness and wealth on perceptions of water supply safety are evident in this body of literature, our research takes a deeper look into the influence of individual socio-cultural variables on multiple cognitive and affective dimensions of tap water acceptance, including reported drinking water behaviors and measures of trust, reliability, taste, concern, and worry.

Expanding on this body of research, we propose that household water security or acceptance and consumption of household drinking water is an environmental justice indicator, reflecting socio-cultural experiences with water, water infrastructure, and management systems. Choices to trust and drink from locally managed water systems may be a function of physical infrastructure conditions and maintenance (real or perceived), institutional trust, and exposure to or shelter from systemic institutional racism and implicit biases inherent in water science, policy, and management that benefit Whiteness and wealthiness (Pahl-Wostl et al. 2010; Wutich et al. 2017; Pradhananga et al. 2019; Walker et al. 2023). In this study of MSP residents' relationships with household drinking water, we hypothesize that acceptance of tap water as a drinking water source is influenced by objective measures of social and cultural identity.

Research Methods

Study Area

MSP is a major Midwest metropolitan area situated at the confluence of the Mississippi and Minnesota rivers, also known as Bdote, the ancestral home and sacred lands of the Dakota people. Understanding water relationships in MSP requires a critical examination of water experiences and trust in public environmental service institutions across socio-cultural variables of difference. Marginalized community members and their community advocates in the region have long recognized the harms caused by racist and classist urban planning policies and land use practices. Environmental justice scholars and social scientists have recently documented the effects of historical institutional racism in environmental planning and confirmed that how and for whom the environment is "managed" has had cascading socio-economic, cultural, and ecological consequences that continue today in MSP (Pradhananga 2019; Walker 2021; Davenport et al. 2023; Walker et al. 2023; Walker et al. 2024). Proximity to lakes and streams drove MSP housing development in the 1940s; racially exclusive covenants and redlining were used to maintain Whiteness and wealth in Minneapolis neighborhoods (Walker et al. 2024) and elsewhere throughout MSP. The results today run much deeper than housing segregation, producing systemic inequities in access or exposure to environmental services and burdens (Walker et al. 2023; 2024). Since housing reform legislation, procedural and representation inequities are promulgated in environmental planning and community engagement processes that fail to adequately engage and represent lower-income and Black, Indigenous, and People of Color (BIPOC) communities (Pradhananga et al. 2019). Further, these communities and their cultural experiences and relationships with water as a

benefit and a liability lack representation in water policy making (Harrison 2019; Pradhananga et al. 2019; Davenport et al. 2023).

Study Design

Our research applies a deliberative science approach (Davenport et al. 2025) and multiple participatory research methods (Davenport et al. 2024) to gather, share and interpret urban water narratives, including water values, beliefs, concerns, and practices among residents in the MSP region. Unfortunately, conventional social science research designs and quantitative methodologies are often exclusive, lacking representation of non-dominant social and cultural relationships with water. Inclusive social science research supports representation justice in environmental planning and policy by engaging community members across their diverse water experiences and relationships (Pradhananga et al. 2019; Davenport et al. 2023). We aimed to particularly engage residents who identify as BIPOC through an inclusive research design, after our previous efforts at USPS mail surveys failed to do so (see Davenport et al. 2024). As a result, we also better represent residents across gender identities, age, income levels, and homeownership status. Together with our Metropolitan Council project partners, we developed a questionnaire to inquire about water experiences, values, and relationships. In collaboration with community partners, we administered the survey onsite at 14 cultural and community events from May to October 2023. We offered a $2 banknote cash incentive to participants 18 years of age and older. The tablet or paper survey was available in English and Spanish, and select events included multilingual staff to interpret the survey in Spanish, Somali, French, and Mandarin. Survey “table stations” included all-ages activities and informational signs in multiple languages (see Davenport et al. 2024). We continued to engage with project and community partners throughout the study process. For example, we presented preliminary findings to community leaders and local water professionals in a series of interactive workshops to guide analysis and interpretation and to inform water policy development (Roth et al. 2024).

Data analysis

We analyzed relationships among six socio-cultural measures and six measures of tap water acceptance. For all analyses, variables were converted to dichotomous dummy variables. For the race/ethnicity variables we created dummy variables to represent participants who selected each race or ethnicity category, regardless of other race/ethnicity categories they may have also selected (participants could select more than one race/ethnicity). However, for the non-Hispanic White Only dummy variable, we restricted membership in this category to participants who identify as White and not Hispanic only, no other additional race/ethnicity category. Two race/ethnicity categories (Native Hawaiian or Other Pacific Islander and Middle Eastern or North African) had small sample sizes and were excluded from inferential statistical analysis. For age, the younger age variable represents participants reporting an age under the sample median age of 36. For income, the low-income variable represents participants reporting a household income below the category representing $75,000-$99,000 (Minneapolis median household income = $80,000, 2023 Census). We also converted the tap water

acceptance measures to dichotomous dummy variables. Variables TRUSTTAP, RELIABLE, and LIKETASTE were created by selecting participants who rated their agreement with the statements as somewhat to strongly agree (1 or 2 on a 5-point scale). Variable WORRY was created by selecting participants who reported they worry “a fair amount” or “a great deal” (3 or 4 on a 4-point scale). To measure trust in local government sources of water information (GOVTRUST), we created an index of three measures of trust in city government, county government, and regional government. We selected participants whose index average reflected “somewhat” to “strongly trust.”

We conducted basic descriptive statistics and Chi-square tests of association to identify univariate relationships between the six socio-cultural and six tap water acceptance as a drinking water source variables (Tables 2-3). We conducted multivariate logistic regression modeling to assess the differential effects of the socio-cultural independent variables on each dependent variable of acceptance. Model fit was assessed using Nagelkerke R-square test (R-square), Hosmer Lemeshow Chi-square test (HLC), and classification overall percentage (COP).

Study Findings

After removing cases of participants who reside outside of the MSP study area, the survey closed with 1,052 total completed surveys. More than two-thirds (67%) of participants identified as one or more of the BIPOC race and ethnicity categories, 55% identified as female, and the median age of participants was 36 years old (Table 1). Two-fifths of participants identified as Black or African American (22%) or Asian (20%). Eleven percent identified as Hispanic, Latino, or Spanish heritage, and 8% identified as American Indian or Alaska Native (AIAN). Participants could select as many race/ethnicity categories as apply to them; 15% of participants selected the multiracial or biracial category and/or selected more than one race or ethnicity category. The participant sample also represents an almost equal number of renters and homeowners (47% renters, 46% owners, 7% selected “other” option). The median income category of respondents is $50,000 - $74,999. The participant pool varies from the US Census population data for the MSP region. About 30% of the MSP population identify as one or more of the BIPOC categories and 51% identify as female, both smaller proportions than represented in our sample (2022 Census). MSP population data report 31% of residents rent their home and a median household income of $94,673. Our sample includes higher proportions of renters and a lower median income level. We think it is important to note that participants have multiple identifying characteristics that may intersect and influence water relationships. For example, more than three-fourths of the American Indian or Alaska Native respondents identify as female (77%). About two-thirds of Black or African American (65%) and AIAN (67%) participants are renters. Any generalizations of our study findings to other urban populations must consider these intersectional identities and their unique representations within our study sample.

Descriptive and associative statistical analysis across the variables show important differences. Non-Hispanic White only (NHWO) participants are significantly more likely to drink water from the tap than any other racial/ethnic group (Table 2). The biggest disparities in who drinks water from the tap show up

between NHWO (91%) and Black or African American participants (50%). NHWO participants are also significantly more than any other racial/ethnic group to trust that tap water is safe to drink, trust local government as sources of water information, and like the taste of their drinking water. NHWO participants worry far less about their water than participants from other racial/ethnic groups. Participants who are renters or reported an income below the median income level were significantly less likely than their counterparts to drink, trust, and like the taste of their tap water, trust local government, and believe they have reliable access to drinking water from the tap at home (Table 3). Renters and lower-income participants worry significantly more than homeowners and higher-income participants about the safety of drinking water from the tap. We also examined water treatment behaviors across participants and found that Asian (77%), Hispanic, Latino, or Spanish (70%), and Black or African American (66%) identifying participants were significantly more likely to treat their water at home than participants of other racial and ethnic identities (Table 4), while NHWO participants were significantly less likely to treat their water (42%).

We conducted multivariable logistic regression on six dependent variables of tap water acceptance as a drinking water source. The independent, or predictor, variables remained constant in each model to explore the relative and differential effects of social and cultural variables on tap water acceptance. In none of the preliminary models were gender, Hispanic, Latino or Spanish, or Asian identity significant predictors of drinking water acceptance, so these variables were removed from further analysis. All six models were statistically significant when compared to the null model and explained 21% to 9% of the variation in acceptance measures. The DRINKTAP model was the best-fitting model overall with an R-square of 0.213, HLC of 0.918, and COP of 74.1%.

Several independent variables had statistically significant effects on tap water acceptance across the six models (Table 5). Being NHWO identifying had the biggest effect in five of the six models. NHWO participants were six times more likely to drink tap water, three times more likely to believe they had reliable access to drinking water, three times more likely to like the taste of their tap water, and two and a half times more likely to trust tap water as participants identifying as any other race/ethnicity. NHWO participants were also three times less likely to worry about the safety of their tap water for drinking. Being Black or African American had a significant effect on four of the six acceptance models. Black or African American participants were one-third less likely to drink from the tap, trust the tap, or believe they had reliable access to drinking water at home as their counterparts (i.e., participants identifying as any other race/ethnicity). These participants were about half as likely to trust local government entities as sources of water information. AIAN identifying participants were half as likely to trust local government as participants of other races/ethnicities. Being a renter had a significant effect on acceptance in five of the six models. Most notably, renters were less than half as likely as homeowners to report liking the taste of their tap water. Renters were also one and a half times more likely than homeowners to worry about the safety of their drinking water. Being lower income had a significant effect on acceptance in five of the six models, including the reduced likelihood of drinking, trusting, and liking tap water. Lower-income participants were also almost half as likely as higher-income participants to believe they had reliable access to drinking water at home. Being younger had a positive effect on beliefs about the

reliability of their drinking water at home and a negative effect on the amount they worry about the safety of their drinking water. In other words, younger participants expressed higher confidence about reliability and worried less than older participants.

Discussion

Safe drinking water is not universally accessible to humans, especially for those who are particularly vulnerable to climate extremes, exposed to contaminants from polluters, or disadvantaged by poorly managed water systems. In the U.S., where water systems in urban settlements are categorized almost universally as “safely managed” (WHO 2025), some urban residents still avoid drinking their household tap water (Abrahams et al. 2000; Pierce & Gonzalez 2017; Family et al. 2019; Brouwer et al. 2020; Grupper et al. 2021; Park et al. 2023). We investigated this phenomenon in a Midwest metropolitan area, where environmental injustices associated with access to housing and ecosystem services or exposures to environmental burdens have been well documented (Walker 2021; Walker et al. 2023; Walker et al. 2024). In this study we ask, “What influences acceptance of household tap water as a source of drinking water?” Our team investigated residents’ acceptance of tap water as a source of drinking water from the perspectives of historically underserved populations, including BIPOC, low-income residents, and renters. To do so, we applied a deliberative science approach (Davenport et al. 2025) and inclusive research methodologies (Davenport et al. 2024) to engage with MSP residents in ways that are culturally appropriate, valued by community members, and representative of diverse water experiences and relationships.

Recent literature has suggested that race/ethnicity, homeownership status, and income matter when it comes to psycho-social access to ecosystem benefits and exposure to burdens (Abrahams et al. 2000; Pierce & Gonzalez 2017; Szaboova et al. 2020; Park et al. 2023). We see similar patterns of differential effects in our analysis and models of drinking water acceptance. Importantly, we measure drinking water acceptance not only as one discrete variable of reported drinking (or not drinking) water from the tap, but also as multiple variables representing different cognitive, affective, and organoleptic perceptions. Our findings support this nuanced multivariate approach, as the effects of socio-cultural variables vary across models. Our findings confirm that Whiteness and wealthiness in MSP mean a resident is more likely to accept tap water as a source of drinking water. Being Black or African American, American Indian or Alaska Native, or a renter is linked to lower trust in local government as a source of water information. Importantly, homeowners and rental property owners are responsible for service lines on private property that connect to the public service lines. Low income and renter populations may also face physical barriers to safe drinking water based on the age and material (e.g., lead) of household service lines. Similar to Family et al. (2019), our younger participants were more accepting of tap water than older participants. A recent research synthesis (Ewoldt et al. 2025) found linkages between HWI and increased consumption of either packaged water or sugar-sweetened beverages, both of which have human and planetary health consequences, as well as increased financial burdens on families. Altogether, our study and related research suggest that certain MSP populations: lower income, renters, Black or African American residents, who face HWI, may be at greater risk than other groups for chronic

diseases associated with dehydration and substituted beverage consumption (e.g., obesity, type 2 diabetes, cardiovascular disease, dental problems).

This study points out that the classification “safely managed system” does not necessarily denote that systems are equitably accessed and universally used. BIPOC, low-income people, and people who rent their homes, especially, may not benefit from water systems. In fact, we uncovered persistent patterns of higher risk perception among these groups in MSP, including higher levels of worry about the safety of household water when compared to non-Hispanic White, wealthy, homeowner participants. In nations and cities with more developed and “safely managed” water treatment and distribution systems, such as the U.S. and MSP, safe water access hinges more on psychological, social, and cultural experiences and norms of acceptance than on physical distribution and access (see Ribot & Peluso’s Theory of Access 2003; Wutich et al. 2017). In urbanized settlements, relationships with drinking water are largely managed and influenced by public institutions like municipal water suppliers and regional policymakers. Acceptance of household tap water as a source of drinking water is a signal of public trust in those agencies and the services and systems they administer and monitor (Wutich et al. 2017). In our study, it is also a signal of Whiteness and wealthiness. It strikes us that findings that link distrust in water management institutions to HWI may be emblematic of the constrained relationships underserved and disadvantaged communities have with many other institutional environmental services and systems, which has undeniable consequences for community health and well-being. Braveman (2022) further argues that these inequities are hard-wired or deeply embedded in public institutions and systems and thus go unnoticed by majority groups in power.

The project sponsor, the Metropolitan Council (Met Council), has applied study findings to form regional water policy and guide community engagement. The Met Council is the regional policy-making body, planning agency, and provider of essential services in the seven-county MSP. Met Council's policies guide comprehensive planning for the 181 cities and townships in the region, which include 119 public water supply service providers. Met Council representatives anticipate this study will support access to information, community water security, and wellbeing in the region, as one Metropolitan Council board member observed during our presentation of preliminary research findings, “My community never drinks water from the tap.” Importantly, distrust in household water and substitution of other beverages also affects revenue for public water suppliers that depend on water fees to maintain quality services.

Water supply risk communication across cognitive (e.g., how safe people believe their water is to drink), affective (e.g., their concerns and worries about their drinking water), and comparative (e.g., choosing bottled water or other beverages over tap water) perceptions is essential, and we argue a primary responsibility of public officials, governance institutions, and water service providers. Water management system reform is needed. Water planners, service providers, and communicators too often focus on physical access, analytical or technical aspects of water services, and use language or framing that have limited relevance to socially and culturally diverse audiences (Pahl-Wostl et al. 2010; Pradhananga et al. 2019). An “If we provide it, they will drink it” approach overlooks issues at the heart of public drinking water access in the U.S. and likely other developed nations: public distrust in institutions,

or perhaps, the untrustworthiness of public institutions. In part, distrust in water management institutions is caused by self-perpetuating cycles of structural and systemic racism and classism in public environmental service institutions (Braveman et al. 2022). Water management institutions have minimal representation of cultural diversity in positions of leadership, they lack system and service transparency, and their decision-making processes typically offer little to no opportunities for culturally relevant community engagement (Harrison 2019; Pradhananga et al. 2019; Brouwer et al. 2020). Altogether, these systems and services create barriers to meaningful water relationships, legitimate opportunities for civic engagement and social learning, and transformative water system change (Pahl-Wostl et al. 2010; Davenport et al. 2023; Davenport et al. 2024).

This study serves as a model for inclusive environmental social science. Many social science research studies on water-human relationships apply survey methodologies through randomized mail surveys or targeted membership Internet or mail surveys with water-related organizations or programs. As a result of the limitations inherent in these methods, minoritized social and cultural groups like BIPOC, women, younger people, and lower-income people are often underrepresented or simply omitted in water social science research, following well-worn paths of underrepresentation in environmental sciences more broadly. This non-response bias effect must not be underestimated in interpreting and applying survey research results. When social science research is used to direct or support environmental policy and management decisions, the non-response bias effect has the potential to prioritize value orientations, reaffirm decisions, and perpetuate power dynamics already entrenched in majority culture-dominated organizations and leadership. However, deliberative science and inclusive social science research methods that represent the values, beliefs, and behaviors of people across socio-economic and cultural variables of difference have the potential to illuminate, expand, and deepen our understanding of human and cultural relationships to the environment and to water. This work expands the universe of values, decisions, and powers that come to bear on environmental policy and management decisions, as well as on community health, well-being, and resilience. Inclusive science leads to more inclusive water policy and practice.

Declarations

Declaration of Interests and Author Contributions

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Mae Davenport: conceptualization, funding acquisition, investigation, methodology, project administration, formal analysis, writing – original draft preparation; **Amelia Kreiter:** investigation, methodology, data curation, formal analysis, validation, writing – review & editing; **Amit Pradhananga:** formal analysis, validation, writing – review & editing; **Sarah Roth:** conceptualization,

methodology, writing – review & editing; **Kowsar D. Mohamed**: investigation, writing – review & editing; **Giovanni Delgado-Ortiz:** investigation, writing – review & editing; **Jennifer Kostrzewski:** methodology, project administration, writing – review & editing

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Tables

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