Great Lakes cities face the simultaneous and intertwined challenges of climate change adaptation and racial inequality. Urban flooding in particular is a growing challenge, and Black, Indigenous, and People of Color (BIPOC) communities are often most affected.

Urban racial and spatial segregation result in uneven exposure to current and future flood risks and exacerbate the economic and health consequences of flooding for BIPOC communities, iiiiiii and 15 of the 25 most segregated cities in the U.S. are located in the Great Lakes region. Decision makers, planners, advocates, and residents in the region increasingly recognize the need to respond to this challenge and are taking steps to do so.

Our research provides resource for local policymaking, programs, investments, and advocacy that can help prepare our region for climate change and empower decision makers to center racial justice in urban flood resilience planning.

Racial justice refers to the work of dismantling systems that have historically oppressed marginalized persons. It is the "proactive reinforcement of policies, practices, attitudes and actions that produce equitable power, access, opportunities, treatment, impacts and outcomes for all" (ICMA, 2021). Racial justice leads to the actualization of racial equity.

There are **five** core principles that can serve as a guide for practitioners to center racial justice in their urban flood resilience and adaptation planning:

- 1. Focus on Root Causes
- 2. Institutionalize Representation
- 3. Co-Own Planning Efforts with Communities
- 4. Center Equity in Data Collection and Analysis
- 5. Facilitate Cross-Sector Collaboration

To support the integration of these principles into policy and planning, we have developed:

- A checklist that operationalizes the five principles, allowing for cities and regions to track their efforts
- Case studies and examples from cities in the Great Lakes region and beyond that serve as examples of the five principles in action
- A resource hub of existing planning and evaluation tools that can be used to support resilience planning that centers racial justice

Resources can be found at http://graham.umich.edu/just-resilience-planning.

- ii University of Maryland 2018, 23
- iii Detroit Metro Area Communities Study 2018
- iv US Water Alliance. (2018). An equitable water future: Opportunities for the Great Lakes Region. US Water Alliance. http://uswateralliance.org/sites/uswateralliance.org/files/publications/uswa_greatlakes_021318_FINAL_RGB.PDF

i Water Alliance, "Water Rising: Equitable Approaches to Urban Flooding and Racial Equity" (US Water Alliance, 2020), http://uswateralliance.org/sites/uswateralliance.org/files/publications/Final_USWA_Water%20Rising_0.pdf; Elizabeth Kennedy et al., "Our Communities, Our Power: Advancing Resistance and Resilience in Climate Change Adaptation" (Baltimore, MD: National Association for the Advancement of Colored People (NAACP) Environmental & Climate Justice Program, 2019), https://live-naacp-site.pantheonsite.io/wp-content/uploads/2019/04/Our-Communities-Our-Power-TOOLKIT-FINAL.pdf.

PUTTING THE PRINCIPLES TO USE

1. FOCUS ON ROOT CAUSES. Urban flood resilience plans and policies can address root causes of racial injustice, such as poverty, racial segregation, income and wealth inequity, and loss of social capital and cohesion. Adopting an anti-racist approach to flood adaptation will ensure that racial injustice is not perpetuated in the pursuit of resilient cities.

Bounce Forward: Urban Resilience in the Era of Climate Change is a strategy paper released by Island Press and the Kresge Foundation in 2015. The paper provides an Urban Resilience Integrated Framework which can be used as a guide for making equitable decisions in the initial stages of flood adaptation planning and continuously revisited. https://www.resilience.org/resources/bounce-forward-urban-resilience-in-the-era-of-climate-change/

2. INSTITUTIONALIZE REPRESENTATION. Representation in decision-making and local government is key to racial justice in urban flood resilience. Representation supports implementation of urban flood resilience plans and helps center racial justice concerns. City governments should ensure equitable representation in their workforce composition and advancement, retention, and hiring practices.

The Urban Sustainability Directors Network has published a fact sheet providing guidance on centering equity in recruitment, hiring, and retention for sustainability departments, environmental organizations, and any practitioners who might find it useful: https://www.usdn.org/uploads/cms/documents/usdn-equity-in-recruitment_hiring_retention.pdf

3. CO-OWN PLANNING EFFORTS WITH COMMUNITIES. Urban flood resilience planning must share decision making power with communities and center their lived experiences and histories. Planners can support this co-production of urban flood resilience plans by using participatory design and community engagement strategies. People United for Sustainable Housing (PUSH Buffalo) founded the Green Development Zone (GDZ) program to address resident concerns of vacant lots and unaffordable utility bills in the West Side neighborhood. As a community developer, PUSH Buffalo purchased several lots and hired and trained neighborhood residents to redevelop them into green spaces and sustainable, energy-efficient housing.

4. CENTER EQUITY IN DATA COLLECTION & ANALYSIS.

The evaluation of urban resilience solutions must also center racial justice. Evaluations should engage frontline communities in the design of the data collection process and evaluation, and incorporate both quantitative and qualitative forms of data.

Detroiters Working for Environmental Justice (DWEJ) ran a program that trained a cohort of local youth organizers in identifying spatial hazards and sites for rehabilitation using GIS. The program, called Build Up Detroit, became a widely-recognized example of centering equity in data operations and co-ownership of planning initiatives within a community.

5. FACILITATE CROSS-SECTOR COLLABORATION. There are often multiple departments and agencies directly or indirectly involved in flood management and adaptation and helping to determine their consequences for racial justice. Watersheds and floodplains cross jurisdictional boundaries, necessitating cooperation at a regional scale as well. Policy makers and planners should not only engage other government entities but also non-profits, community groups, and neighborhood associations, as well as partners in the public sector to ensure actions are coordinated and well-integrated.

Milwaukee Metropolitan Sewerage District (MMSD) is a regional agency providing water reclamation and flood management services to the Greater Milwaukee Area. MMSD runs a business development program offering coaching and consulting services as well as networking opportunities to local small businesses owned by veterans, minorities and women. This program demonstrates one way to promote equity in flood management while reaching across sectors to facilitate greater collaboration.