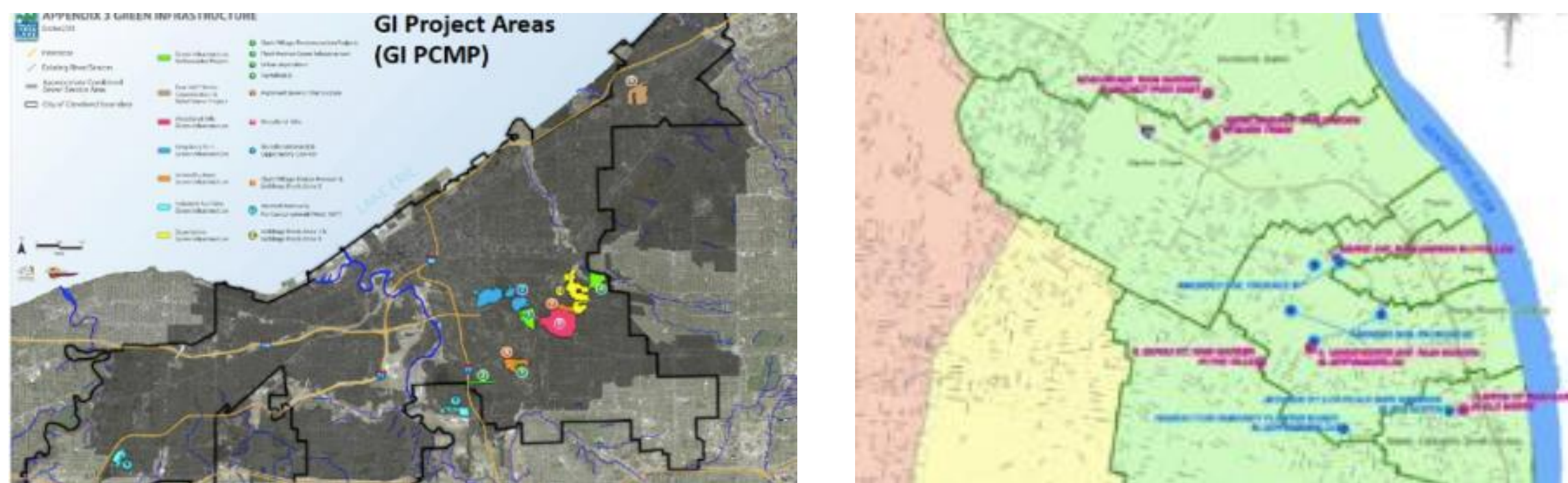


The Influence of Equity Provisions in Consent Decrees on Green Infrastructure Projects

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Green Infrastructure and Consent Decrees

- Green infrastructure (GI) is a form of stormwater management. It reduces combined sewer overflows and can beautify neighborhoods.
- In the context of stormwater management, a consent decree is an agreement between the EPA and sewer districts to bring sewer districts into compliance with the Clean Water Act.
- Cleveland, Ohio and St. Louis, Missouri signed consent decrees with the EPA in 2010 and 2011.
- Cleveland was able to implement GI projects that were resilient, brightened the city, were accessible by residents, but St. Louis did not.
 - Why in cities with similar socioeconomic (significant economic decline, aging infrastructure, dramatic population loss, high percentage of people in poverty) are results so different?



Literature Review

GI offers community benefits like recreation opportunities and beautification, which is assumed to improve the quality of life and raise the value of property.

However, consent decrees can exacerbate existing inequalities GI projects lack public participation, accountability, and inclusion in negotiations.

This is because consent decrees often preclude the flexibility that municipalities need to effectively implement and sustain GI.

Scholars believe this issue can be solved through equity provisions in consent decrees, which mandate that GI projects benefit low-income and minority neighborhoods.

Whether there is a causal relationship between equity provisions and more inclusive decision-making processes and therefore higher community satisfaction is uncertain.

- This research therefore aims to strengthen the analysis of the socioeconomic and governance factors behind (un)successful projects.
- This will allow for causal inferences to be made between inclusive decision-making processes and environmentally and socially beneficial GI projects.
- Ultimately, this research aims to understand how consent decrees can help local communities prioritize and distribute investments to address sewer overflows.

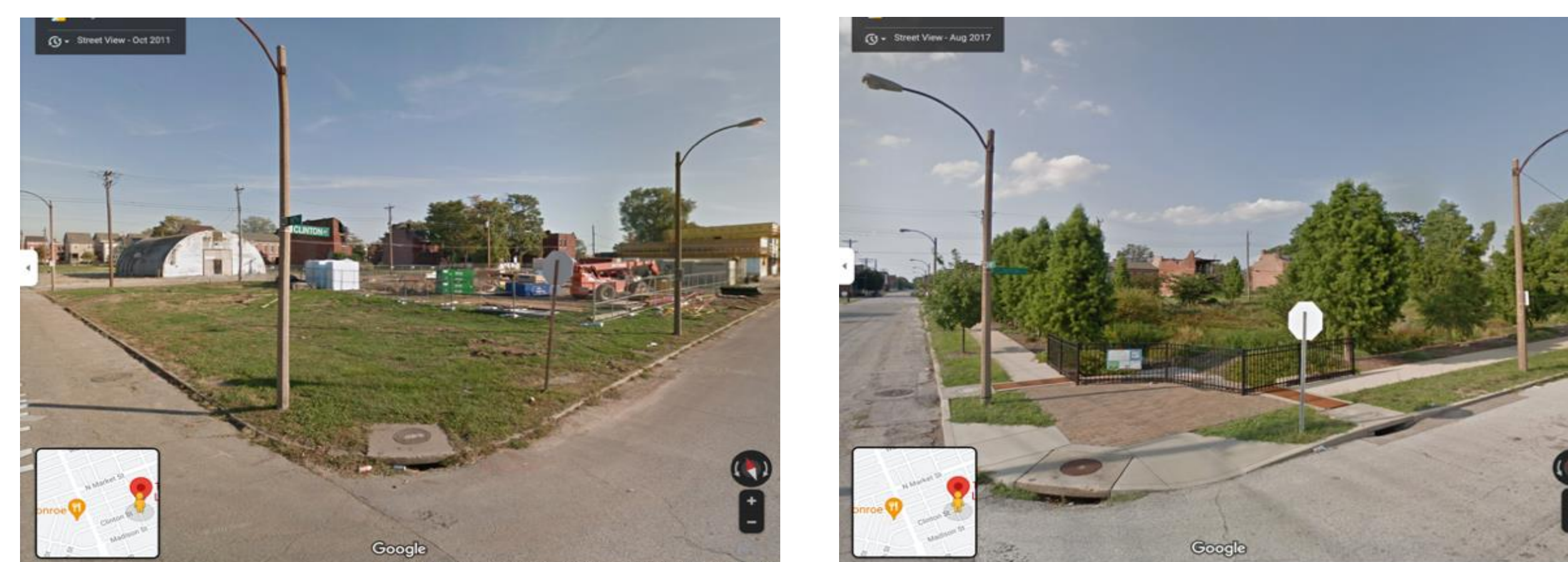
Method

- Qualitative analysis of socioeconomic data (2000, 2010, and 2020 Censuses), planning documents, google maps images, public meeting flyers and minutes, and local newspapers.
- Snowball sampling within two participant pools: practitioners and residents.
- Semi-structured interviews with practitioners were coded under five themes:
 - defining success and therefore what was successful
 - governance factors that influenced results
 - socioeconomic factors that influenced results
 - consent decree factors that influenced results
 - recommendations for improvements.
- Semi-structured interviews with residents will be more about awareness and perception of GI projects in their community.

St. Louis, Missouri

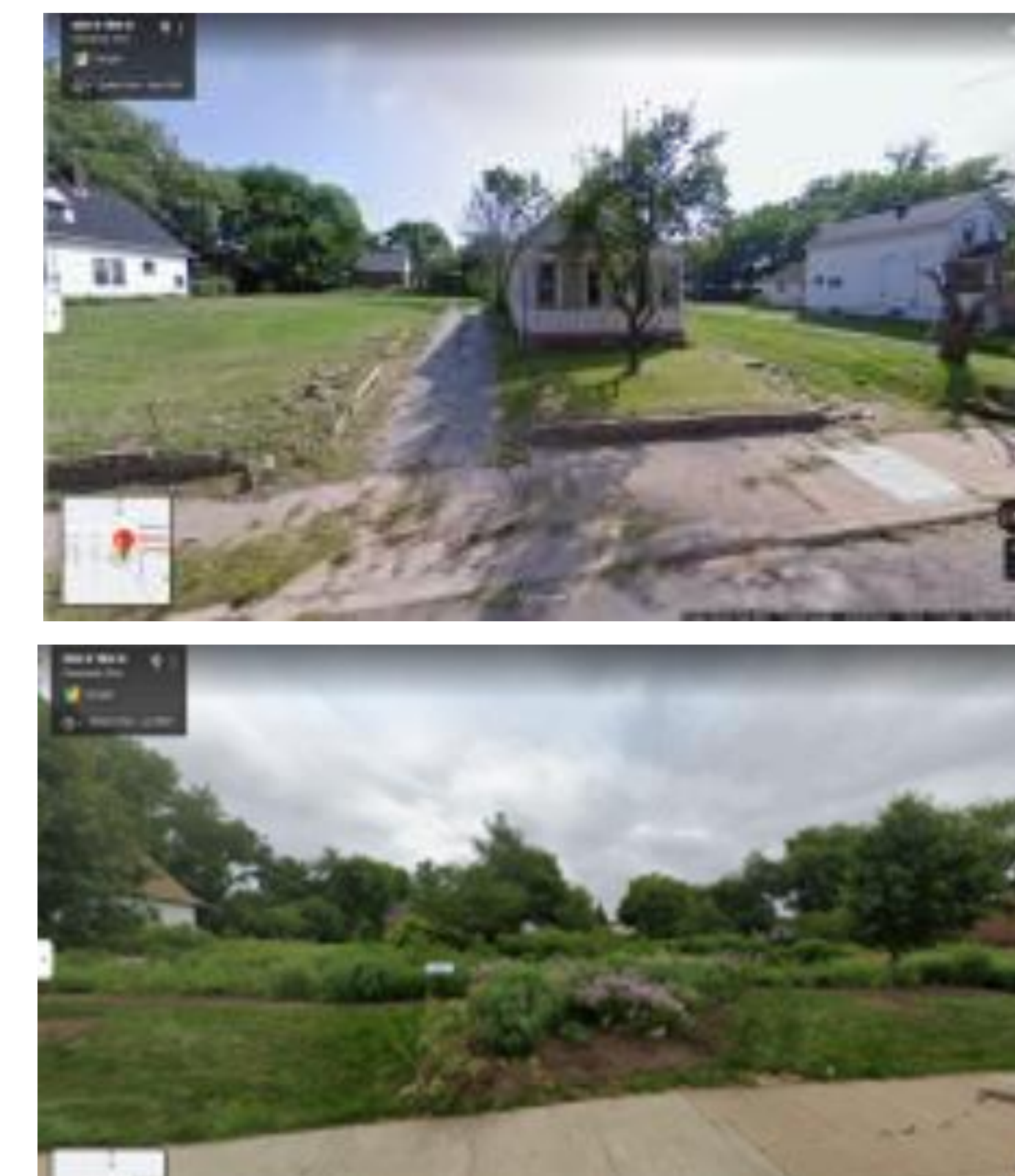
- St. Louis measured their green infrastructure success in terms of volume control. There was little to no community involvement. This led to wide demolitions of vacant property to the North of Delmar.
- The consent decree exacerbated the socioeconomic divide over Delmar Boulevard:
 - North of Delmar receives \$200 million for demolitions of abandoned property to create "green basins."
 - South of Delmar receives \$4 billion for individualized rain garden projects, better public spaces, and underground sewage pipe expansion.
 - No discernible benefit from a residential viewpoint – no more building permits filed than before, no cascading actions affecting other vacant lots or buildings nearby, no changes to property taxes.

"Success... is compliance with the consent decree"
- Bruno, J. (EPA Region 7), personal communication, April 2022



Left: Before, Right: After. The project is a large detention basin that is inaccessible by the community.

Cleveland, Ohio



- Cleveland's sewer district collaborated with local non-governmental organizations like the Slavic Village Development Corporation as well as with St. Louis residents.
- Such inclusive governance improved site selection and made resilient GI projects with a discernible benefit to the community.

"Equity is happening in a context of partnership and collaboration... they are here on the ground with us"

- Sierra, K. (Slavic Village), personal communication, April 2022

Findings & Policy Implication

Major Findings:

- It is necessary to build more time into the front end of the negotiation process to strategically lay out a consent decree with planning and departments, as well as communities across the full range of stakeholders.
- Equity provisions are unlikely to change underlying governance or socioeconomic factors if there is no pre-existing culture of collaboration between sewer districts and community organizations.

Policy Recommendation:

Create a third party task force for consent decrees within the U.S. Environmental Protection Agency to facilitate better communication between EPA enforcement, the sewer district, the city, major community organizations, and residents. This will:

- Help federal agencies understand unique socioeconomic and governance factors in the sewer district to better select the type of project and its site.
- Help federal agency navigate financial realities to create an appropriate funding structure.
- Help minority groups and community concerns be heard through a position of authority.

Holloway, C., Strickland, C., Gerrard, M., Firger, D. (2014). Solving the CSO Conundrum: Green Infrastructure and the Unfulfilled Promise of Federal-Municipal Cooperation. *Harvard Law Environmental Law Review*, 38, 335-370.

Heck, S. (2021). Greening the color line: historicizing water infrastructure redevelopment and environmental justice in the St. Louis metropolitan region. *Journal of Environmental Policy & Planning*, 23(5), 565-580.