

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

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I: Background

I: Demographic & Socioeconomic Data

	Cleveland, OH	St. Louis, MO
Population (2020)	372,624	301,578
Population (2010)	396,815	319,294
Population (2000)	478,393	348,189
Changes (%) 2010-2020	-6%	-6%
Changes (%) 2000-2020	-22%	-13%
Persons 65 years and over	14.00%	13.10%
Female	51.90%	51.60%
White alone	40.00%	46.50%
Owner-occupied housing unit rate	41.60%	43.70%
High school graduate or higher*	80.80%	87.80%
Bachelor's degree or higher*	17.50%	36.30%
Median household income**	\$30,907	\$43,896
Per capita income in past 12 months**	\$21,223	\$30,542
Persons in poverty	32.70%	21.80%

Source: Census 2000, 2010, 2019 (5-Year ACS)
 * Percent of persons age over 25 years, 2015-2019
 ** In 2019 dollars, 2015-2019

I: Equity Provisions

The only differentiating factor?

Cleveland:

“benefit low-income and minority neighborhoods with abundant vacant and abandoned land”

St. Louis:

“focus on abandoned and blighted properties on the north side of St. Louis”

I: Research Question

What is the effect of equity provisions in consent decrees in increasing the inclusivity of decision-making processes behind green infrastructure projects, and therefore increasing residential satisfaction?

I: Significance

- Since 2007, federal, state and local governments have promoted green infrastructure, assuming it will contribute to improvements in both water quality and equity.
- However, not many studies have found if and how federal involvement improved equity or not.
- This study investigates the equity aspects i.e., inclusive planning and residential satisfaction.
- The findings of this study will inform decision-makers to facilitate more equitable outcomes.

II: Interviews

II: Interviews

- Practitioners in NGOs, Public / Sewage Districts, and Enforcement
- Snowball Sampling had a 100% return rate
- So far:
 - Three from St. Louis (one more scheduled)
 - One from Cleveland (two more scheduled)
 - Around 35 minutes each, semi-structured with themes

II: Original Themes

environmental
awareness

project
awareness

project
perception

project process
perception

how they
perceive CSO /
GI equity issues

how they rank
these issues
amongst other
issues

II: New 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

III: Findings

III: Unique Socioeconomic Character of St. Louis



III: Governance Clashes



III: Pre-Existing Cultures

St. Louis

No collaboration between MSD and other organizations

“Checkbox” Mentality; Compliance is main priority

Dismisses equity considerations as it is not explicit in authority

Cleveland

High collaboration between NEORSD and other organizations

Where their expertise or authority lacks, other organizations are welcome

Equity has been a notable focus since 2000s

III: Enforcement Perspective

“MSD is the permitted agency. They're the ones that were discharging the sewage. They were the ones in violation. So that's who we would negotiate with.”

“they typically spend well over what they would have to...that really points out that they are seeing some benefits from it.”

IV: Policy Implications & Next Steps

IV: Policy Recommendation

Establish a third-party task force to balance and mediate interests in green infrastructure projects

- Build more time into the front end
- Incorporate planning and development departments and communities

IV: Next Steps for Interviews

- Conduct 10-15 more interviews in May and June
 - Federal Regional Agency: EPA Region 5
 - State Agency (Missouri Department of Conservation and Ohio EPA)
 - Local Government (St. Louis City and Cleveland City)
- Continue to develop codes
- Find similarities, differences, and contrast

V: Conclusion