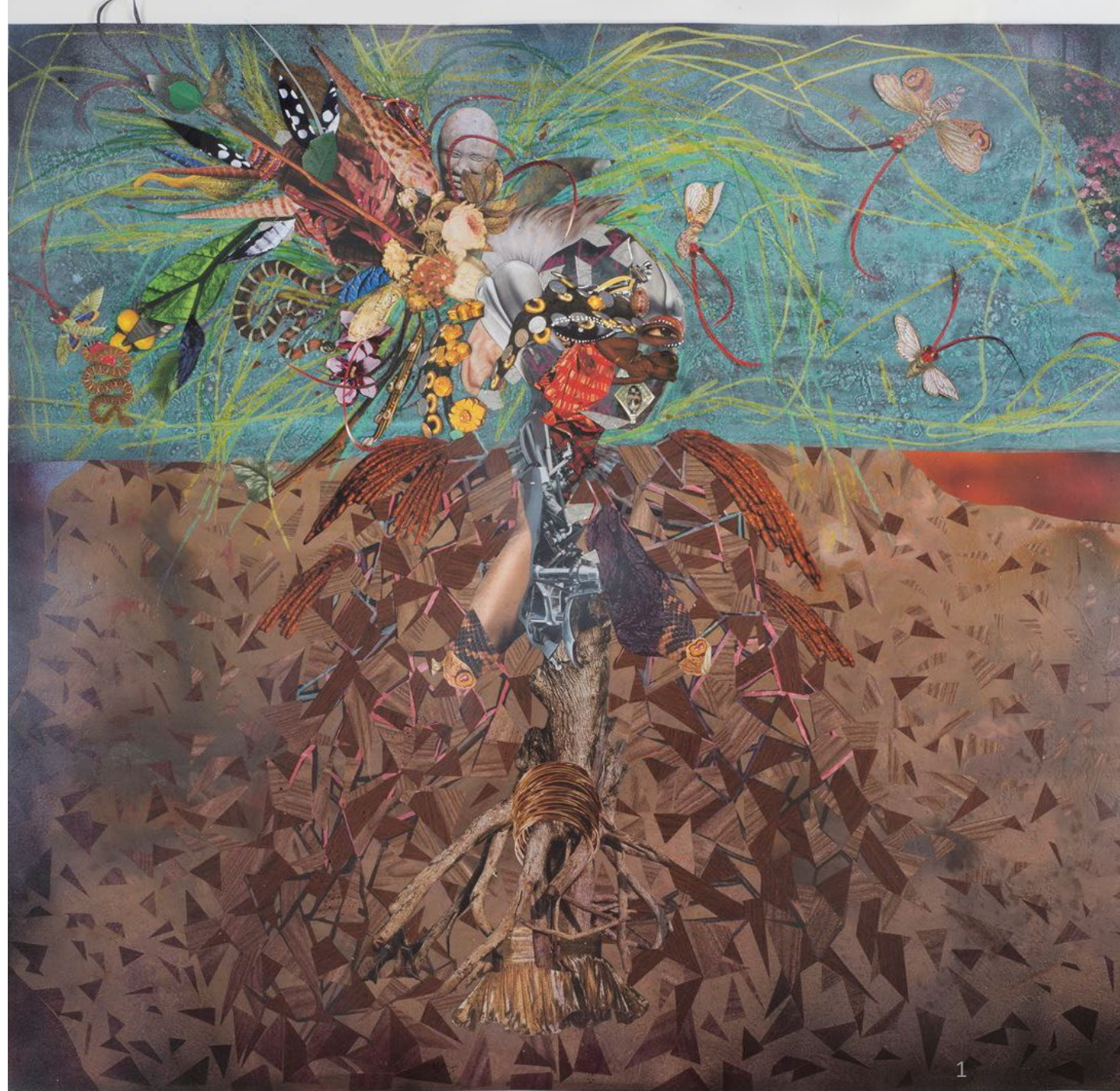


# Stormwater on the Margins

Rachel Scarlett

Indiana Water Summit  
August 10<sup>th</sup>, 2021

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BLOOMBERG SCHOOL  
*of* PUBLIC HEALTH



# Water as A Divider: When Beaches Were Not For All

By Audrey Peterman, published in Florida Humanities

Water is the symbol of many things — renewal, rebirth, life itself. But in the Jim Crow South, it was a stark physical reminder of an enforced separation.





Tropicália, Wangechi Mutu

# Rising Costs of U.S. Flood Damage Linked to Climate Change

As warming temperatures intensified precipitation over the last 30 years, floods costs have risen by \$2.5 billion

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By Thomas Frank, E&E News on January 13, 2021



# Birthplace of the Environmental Justice Movement



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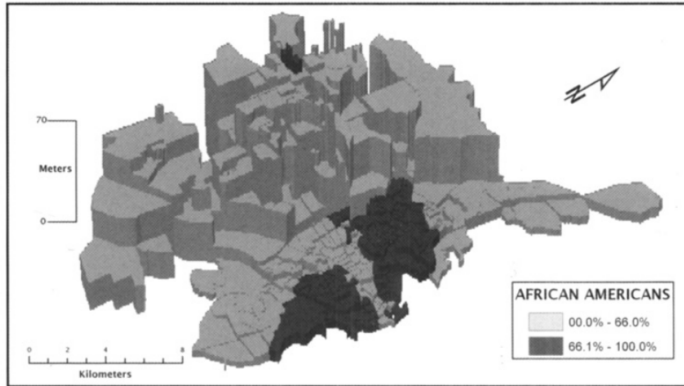


FIG. 6—In Mobile, Alabama in 2000, black neighborhoods, with one exception, are located in the lower-elevation urban core. *Sources:* Calculated by the authors from data in U.S. Census Bureau 2000. (Cartography by the authors)

## RACIALIZED TOPOGRAPHIES: ALTITUDE AND RACE IN SOUTHERN CITIES\*

JEFF UELAND and BARNEY WARF

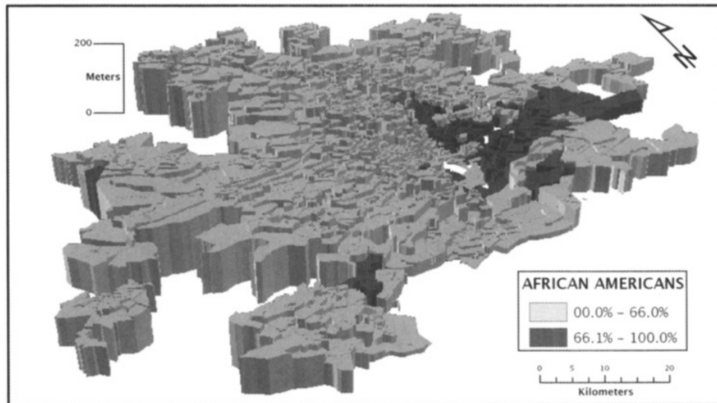


FIG. 3—Race and altitude in the Washington, D.C. Metropolitan Area in 2000 reflected an increasing proportion of white residents on suburban hillsides. *Sources:* Calculated by the authors from data in U.S. Census Bureau 2000. (Cartography by the authors)

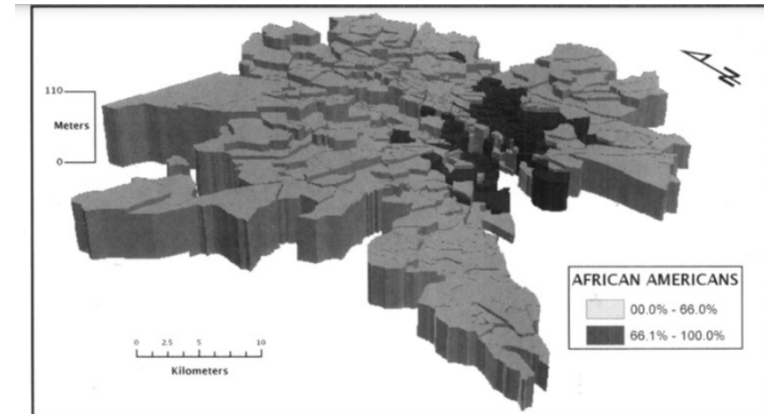


FIG. 4—Relationships between race and altitude in Richmond, Virginia in 2000 point to white suburbs surrounding the low-lying, predominantly minority-inhabited central city. *Sources:* Calculated by the authors from data in U.S. Census Bureau 2000. (Cartography by the authors)



# Stormwater hazards are inequitably distributed

## FISH SMART in San Francisco Bay

Harmful chemicals like mercury and PCBs are in some fish in San Francisco Bay. **Women 18 - 45 years old and children should *only* eat the fish with less chemicals in them.**

有害化学物质诸如汞，多氯联苯等存在于三藩市海的某些鱼体内。妇女**18 - 45**岁和儿童应当只吃化学物质含量少的鱼。

Algunos tipos de pescado de la Bahía de San Francisco contienen químicos dañinos como mercurio y PCBs. **Las mujeres de 18 a 45 años y los niños solo deben comer el pescado que contiene menos químicos.**



Learn more: [www.sfbayfish.org](http://www.sfbayfish.org) • (510) 622-3170

| EAT THIS<br>Less Chemicals  | NOT THIS<br>More Chemicals  |
|---|---|
| <br>Jacksmelt              | <br>Striped Bass<br>(Safe to eat for women over 45 and men) |
| <br>Brown rockfish         | <br>Surperches   |
| <br>Red rock crab          | <br>Sharks  |
| <br>California halibut     | <br>White croaker<br>(Kingfish)                             |
| <br>Chinook (king) salmon | <br>White sturgeon   |





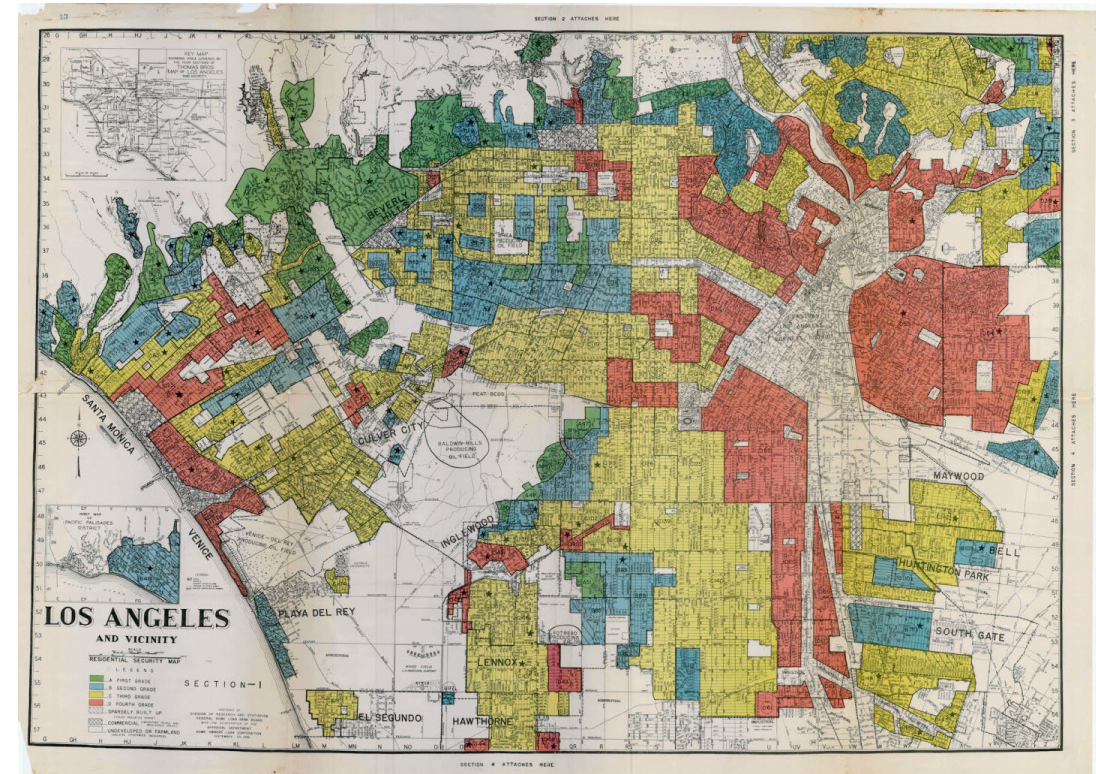
Green space and infrastructure are inequitably distributed

# The Racialization of Space and the Spatialization of Race

Dr. George Lipsitz

“People of different races in the United States are relegated to different physical locations...”

“Indeed, neighborhoods are not merely groupings of individuals, homes, and commerce, they are constellations of opportunities with powerful consequences...” – Dr. Laura Pulido

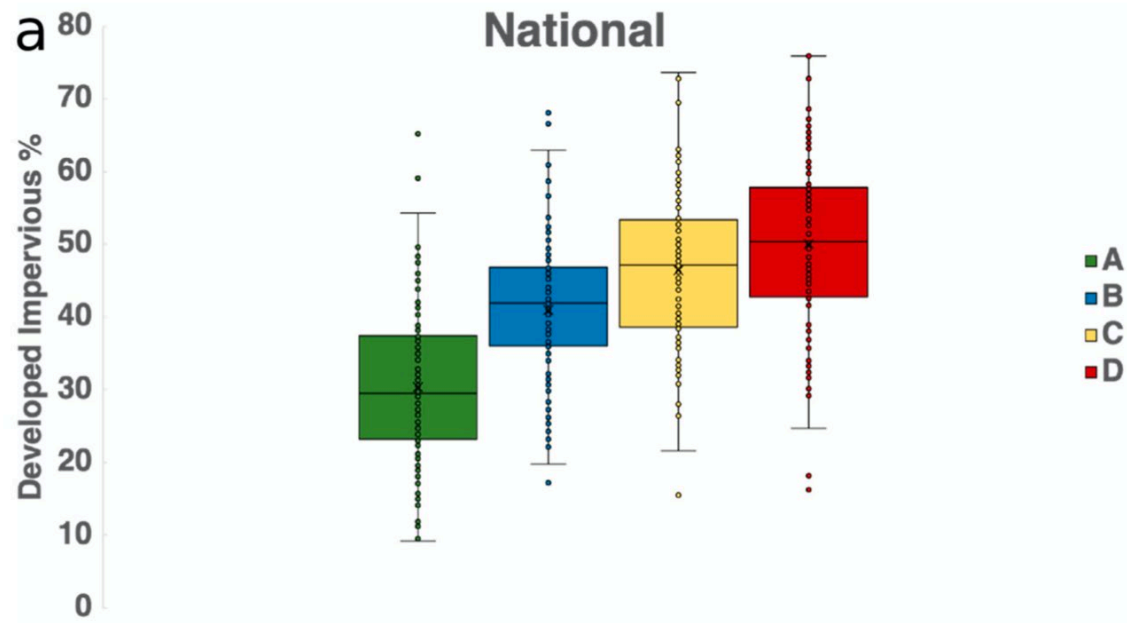


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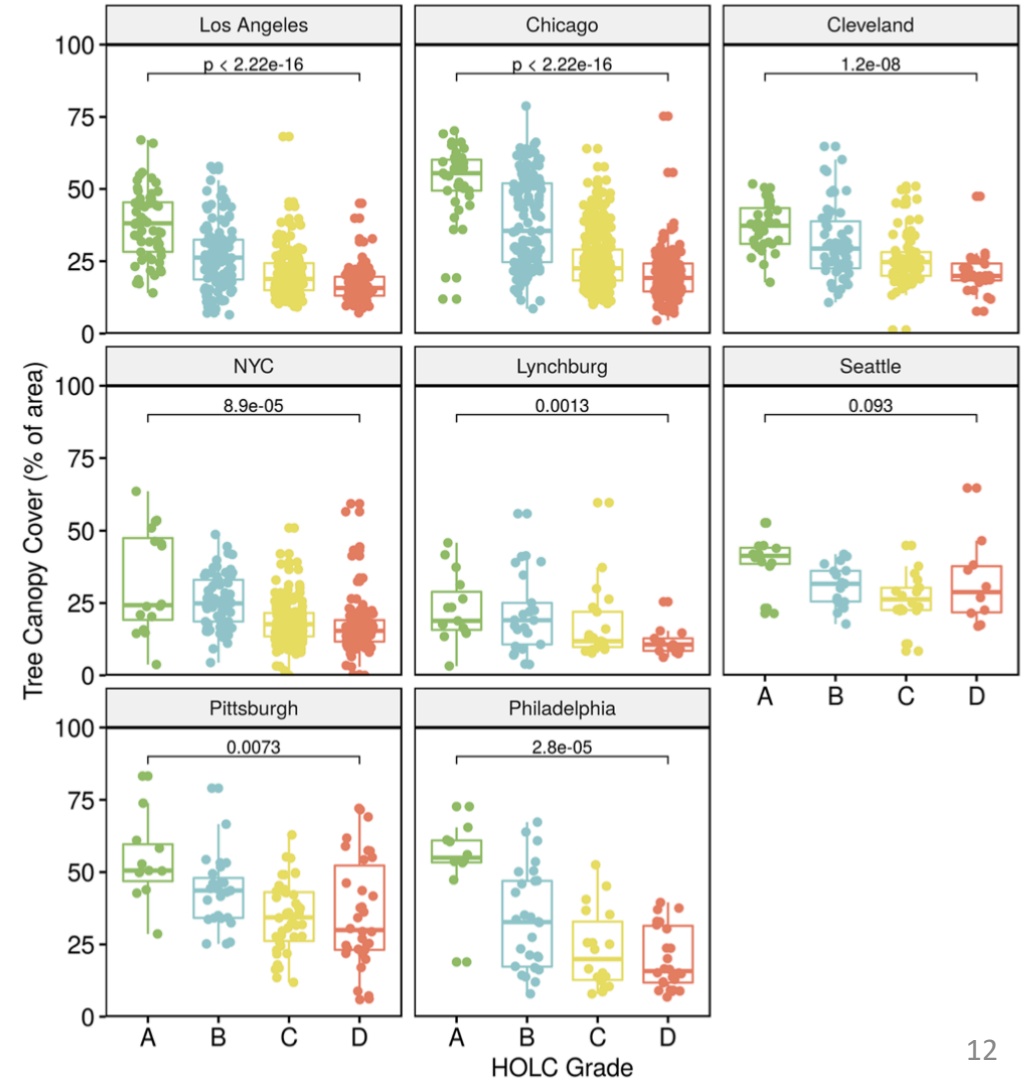
# The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas

Jeremy S. Hoffman <sup>1,2,\*</sup>, Vivek Shandas <sup>3</sup> and Nicholas Pendleton <sup>1,2</sup>

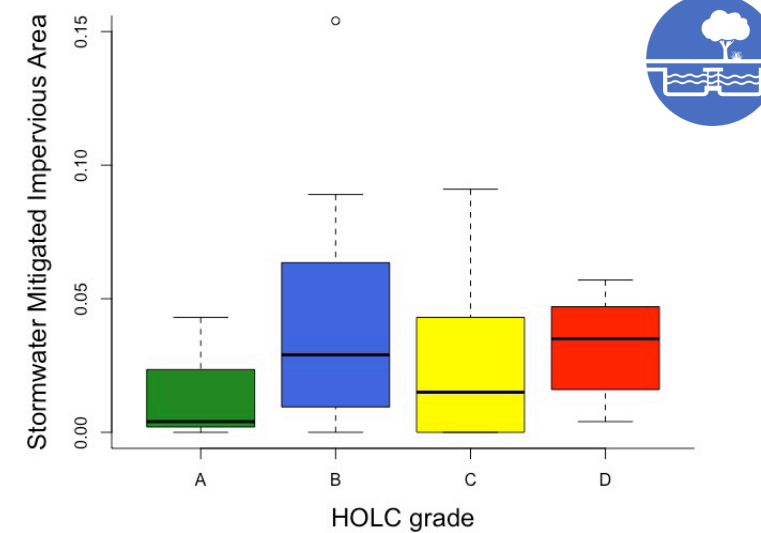
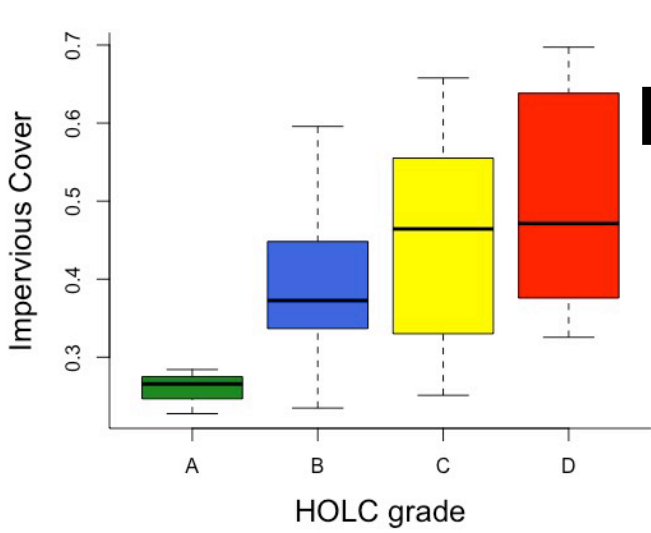
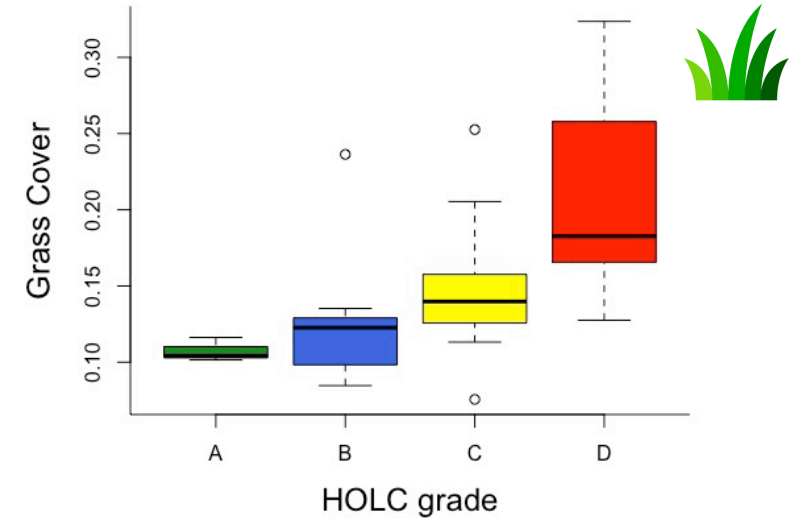
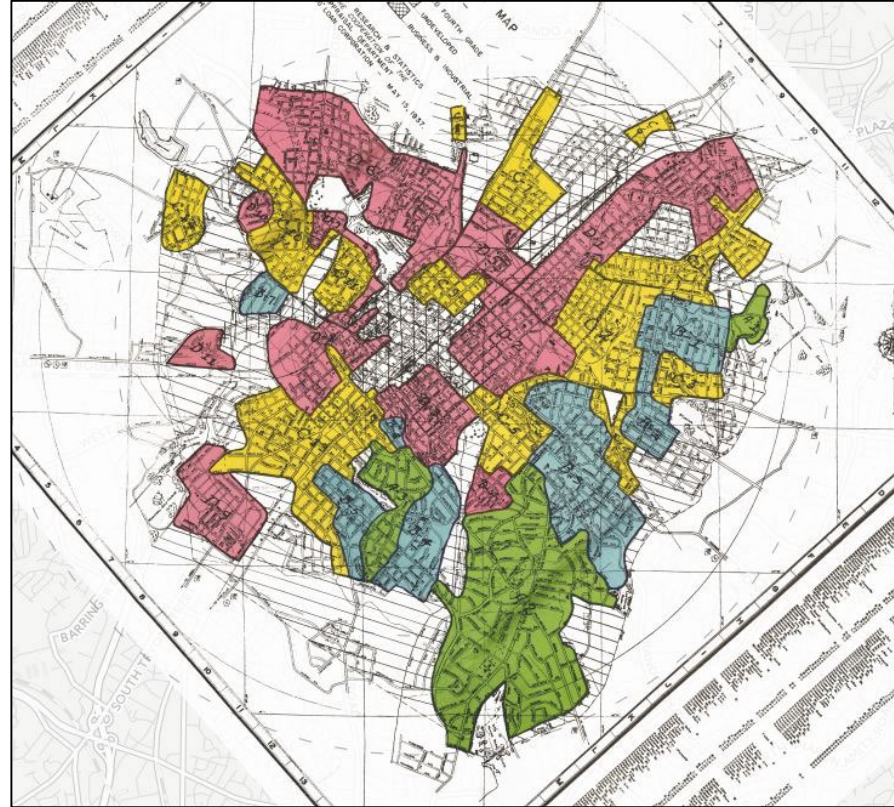
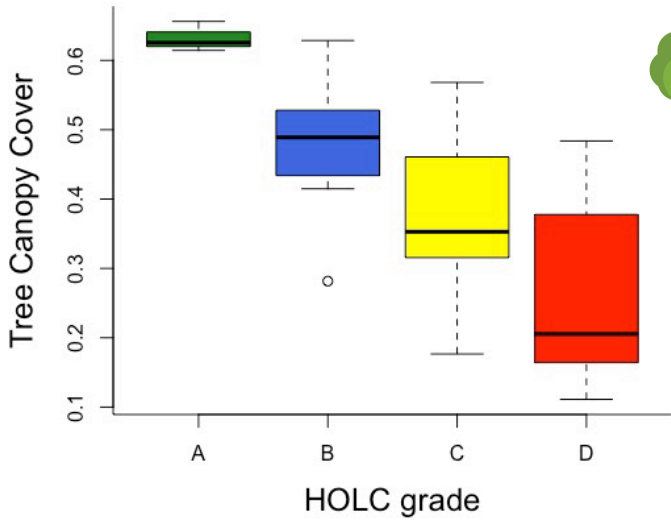


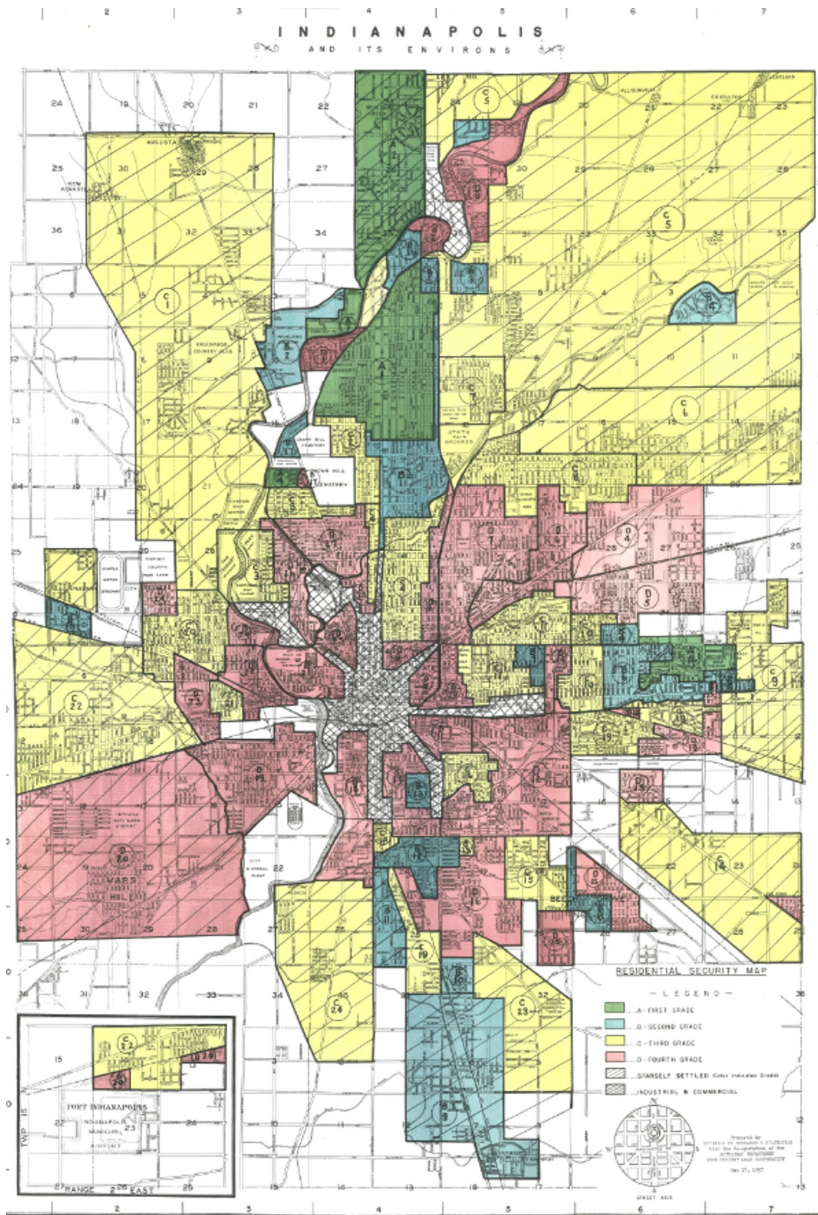
# Residential housing segregation and urban tree canopy in 37 US Cities

Dexter H. Locke <sup>1</sup>, Billy Hall <sup>2</sup>, J. Morgan Grove <sup>1</sup>, Steward T. A. Pickett <sup>3</sup>, Laura A. Ogden <sup>4</sup>, Carissa Aoki <sup>5</sup>, Christopher G. Boone <sup>6</sup> and Jarlath P. M. O'Neil-Dunne <sup>7</sup>



# Charlotte, NC: Impacts of Redlining Still Felt Today





# The White River: Boundaries of 'redlining' maps still etched in Indianapolis neighborhoods

The city of Indianapolis champions the White River Vision Plan in areas once 'redlined,' but some residents question who will benefit.

Sarah Bowman, Indianapolis Star

Published 3:33 PM PDT May. 2, 2020 | Updated 6:56 PM PDT May. 2, 2020

# Assessing the Socioeconomic Impacts of Wetland Mitigation in the Chicago Region

Todd BenDor, Nicholas Brozović, and Varkki George Pallathucheril





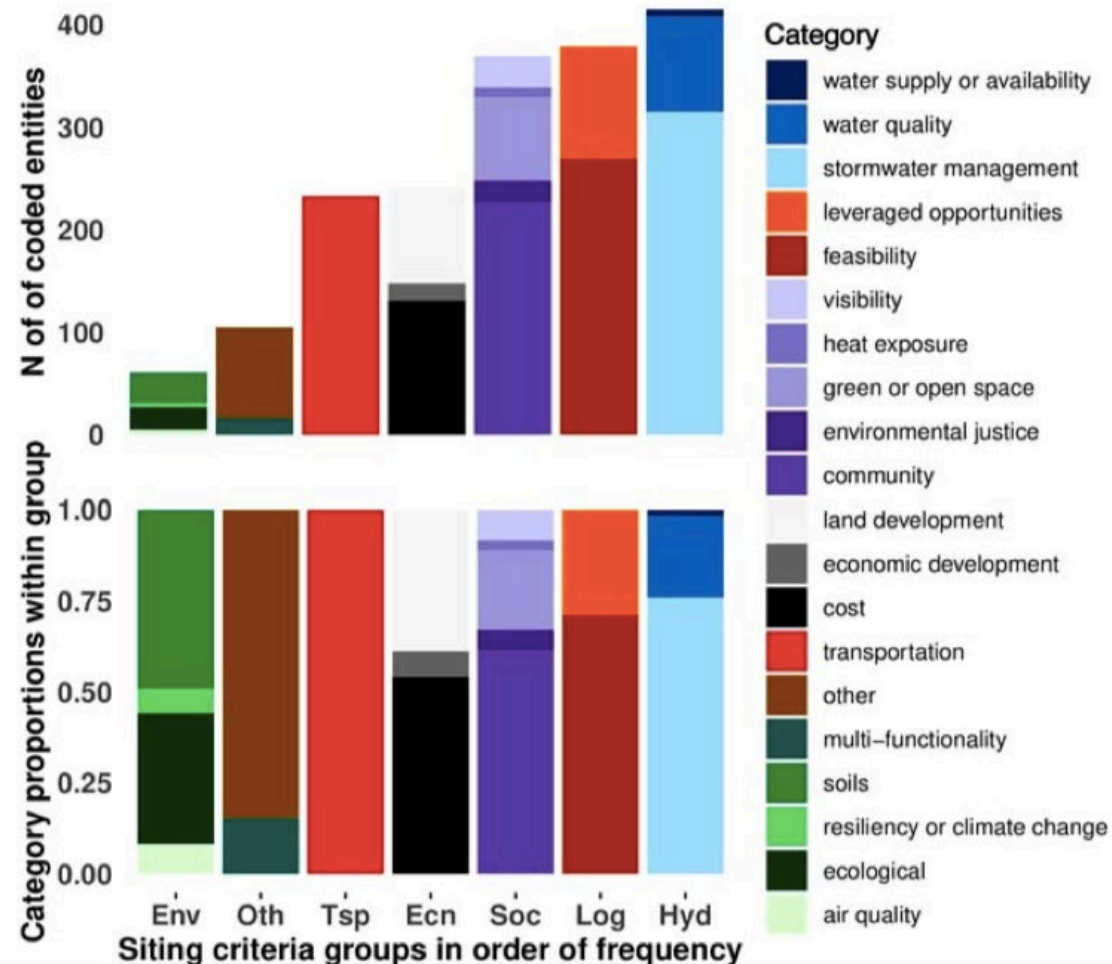
## 'Last line of defense': New bill would strip protections for many of Indiana's wetlands








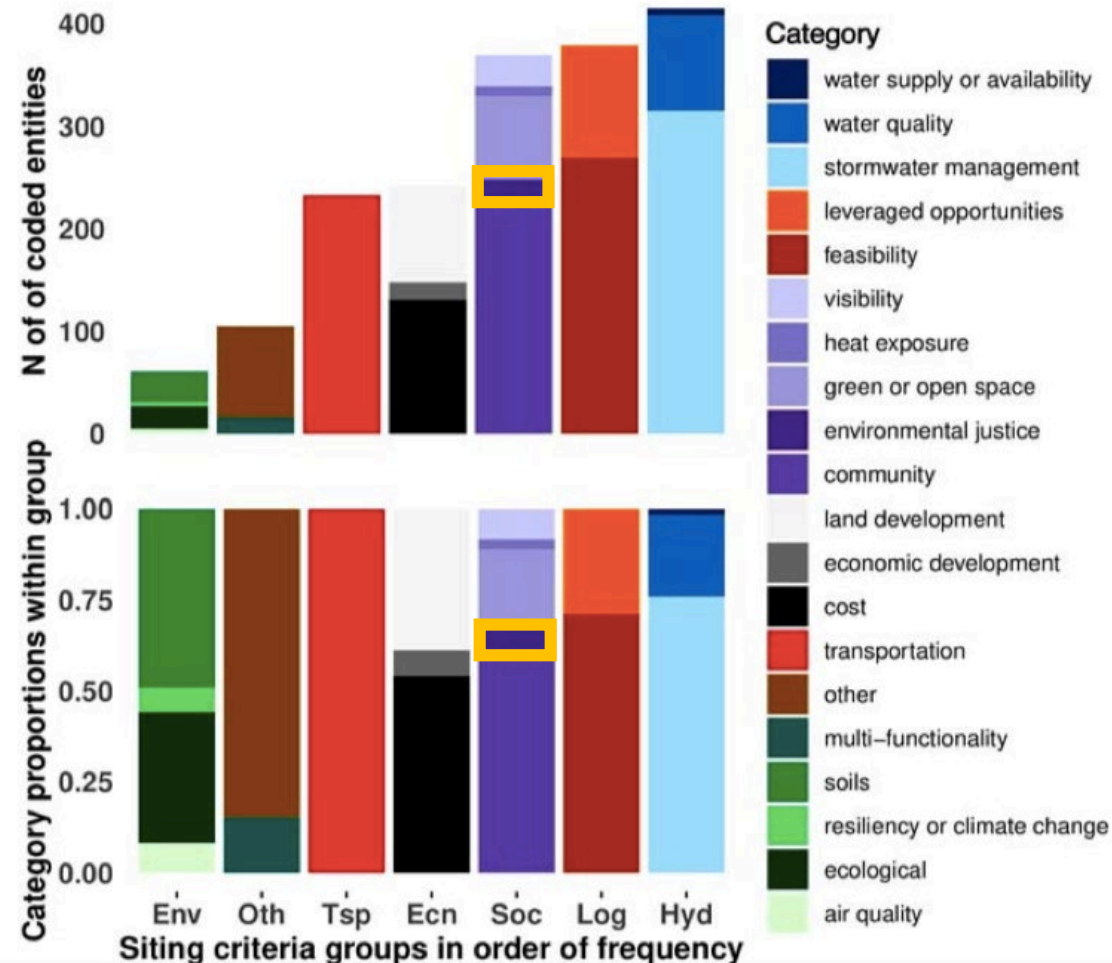
# Environmental justice implications of siting criteria in urban green infrastructure planning

Fushcia-Ann Hoover <sup>a</sup>, Sara Meerow <sup>b</sup>, Zbigniew J. Grabowski<sup>c,d</sup> and Timon McPhearson <sup>c,d,e</sup>



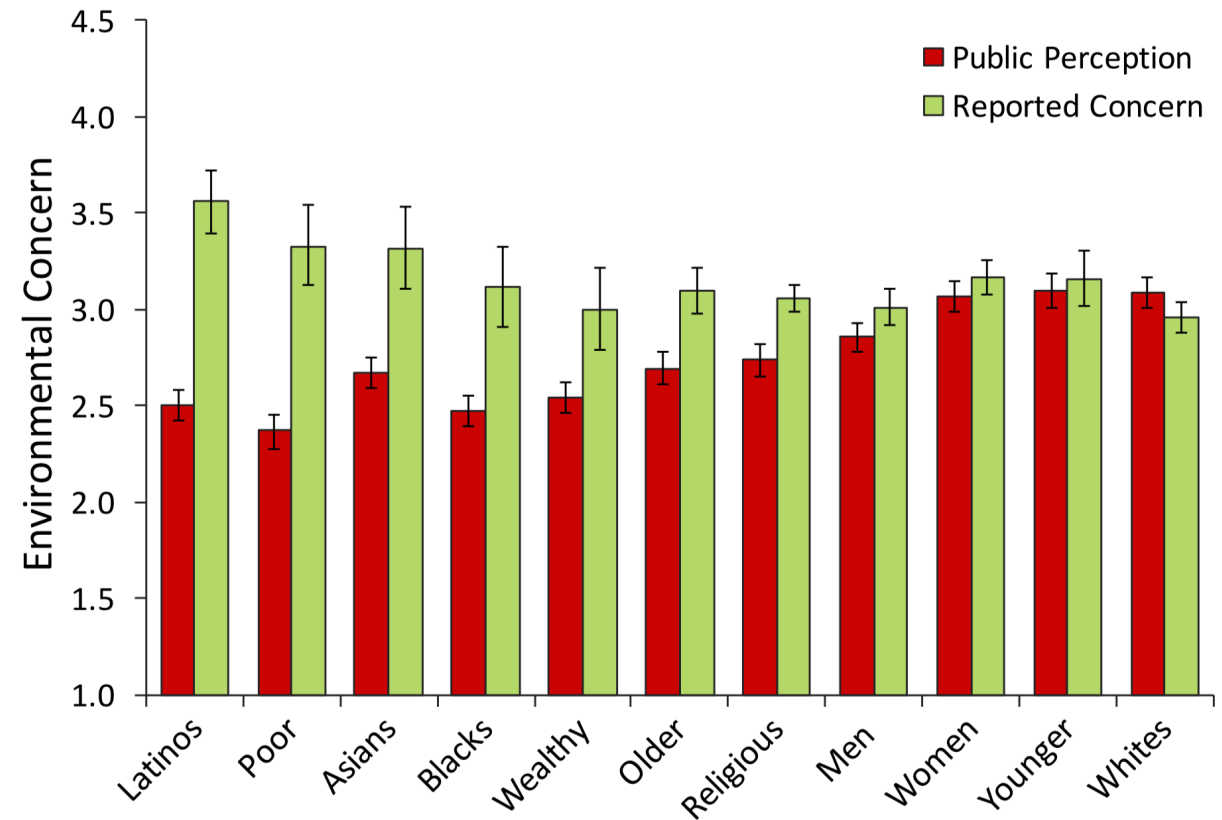
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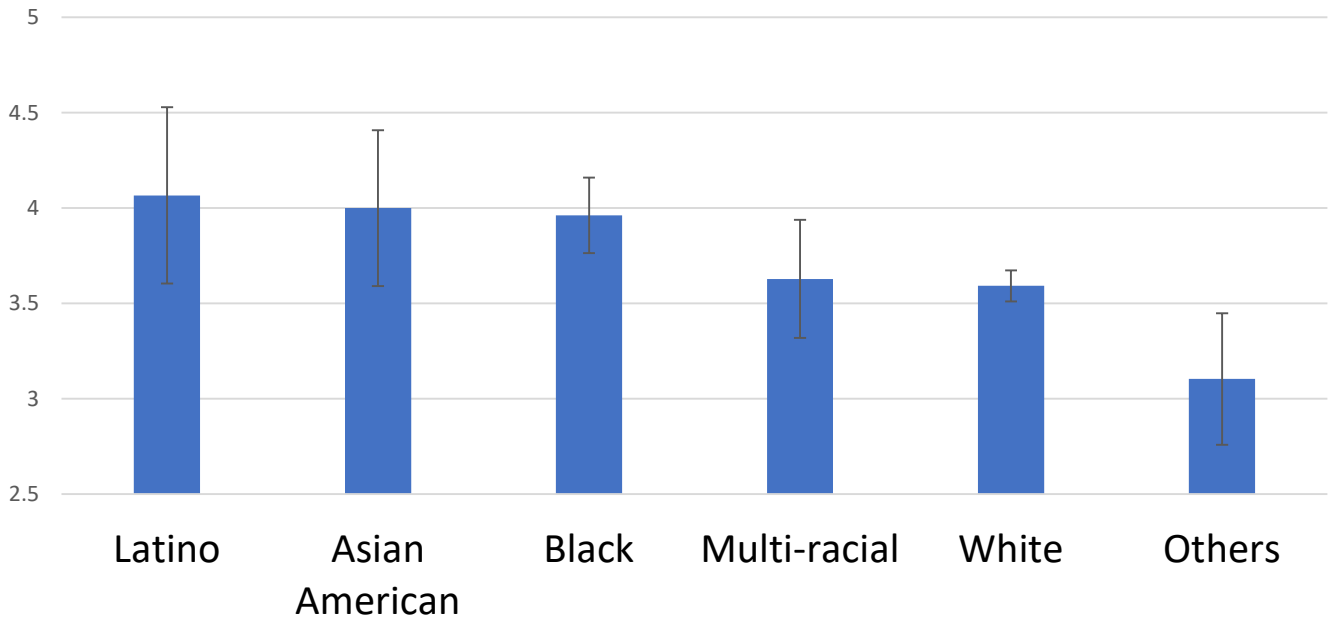
## UNDERESTIMATION OF CONCERN

- Marginalized groups: Self-reported concern is much higher than perceived concern by public
- Groups' concern is largely underestimated which could influence inclusion in participatory processes and coalition building

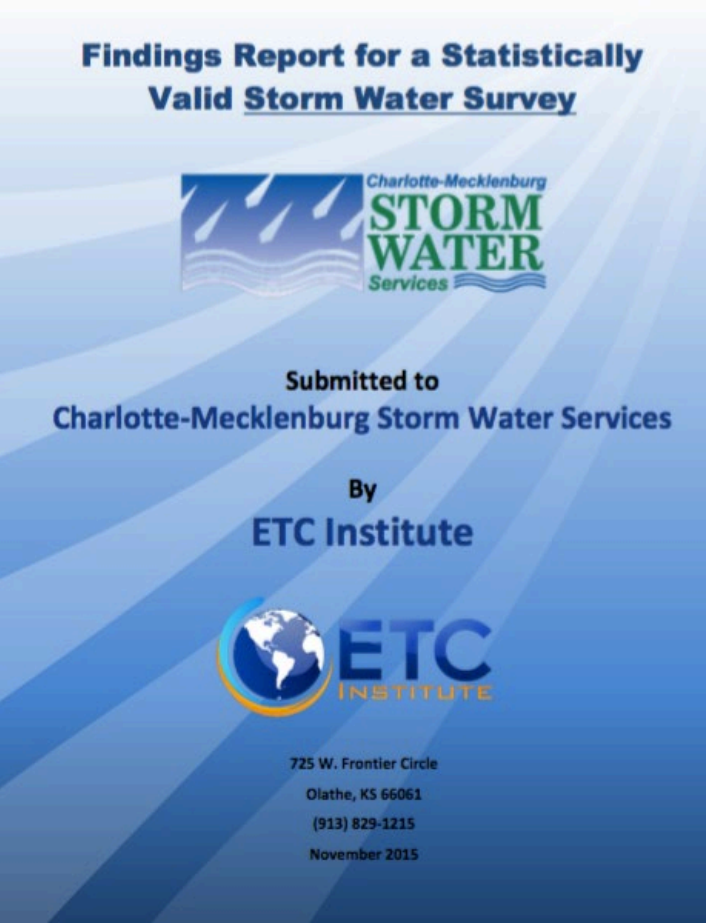
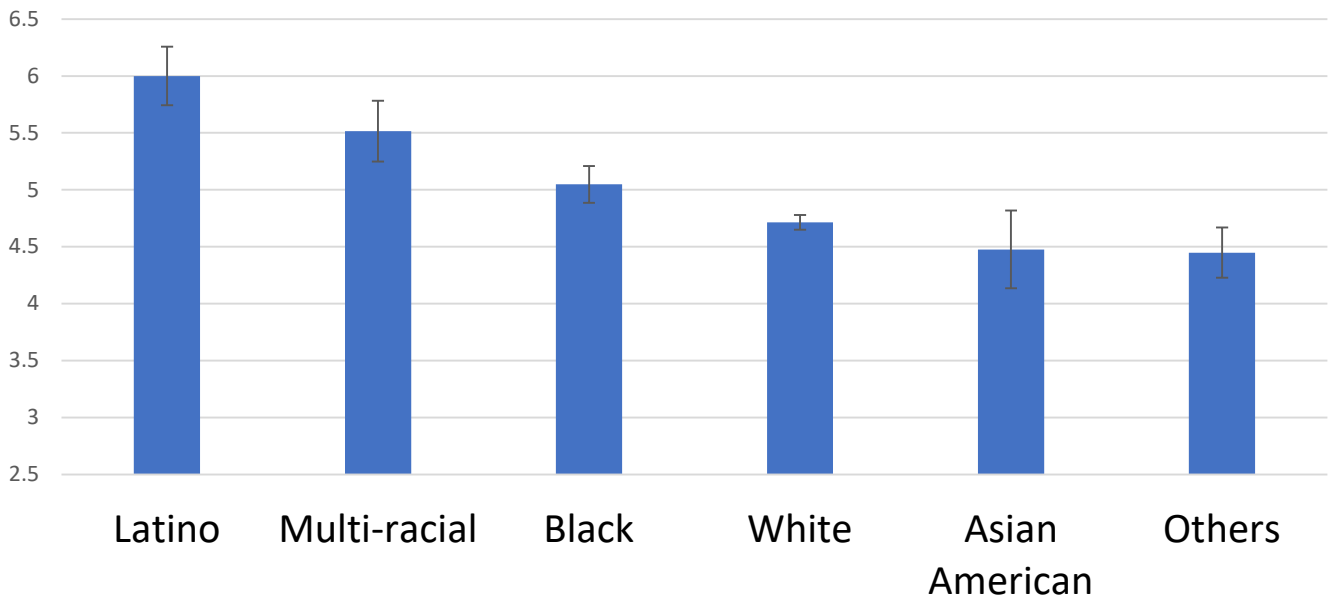


Pearson et al. (2018)

### Willingness to Pay for Stormwater Remediation



### Concern for Flooding



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