

Abstract

Examining the relationship between historical redlining and tree canopy cover in latinx communities in los angeles county.

Evelyn Alvarez, PhD

Cal State LA, Redondo Beach, CA

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Background: Redlining, one of the many institutionalized racist policies in the United States, has been associated with many environmental health disparities affecting Latinx populations in Los Angeles County including access to green space. After the Great Depression of the 1930s, the New Deal introduced the Home Owner's Loan Corporation (HOLC) which, through 'security maps,' examined prior home values, industrial presence, and racial demographics in a way that entrenched racial segregation, prevented the accumulation of wealth by Latinx communities, and furthered environmental injustice.

Aims: To assess if redlining has impacts on tree canopy in Latinx neighborhoods in Los Angeles County.

Methods: Using ArcGIS, LA County Redlining maps from the University of Richmond's Mapping Inequality Project were layered with TreePeople and Loyola Marymount University's LA County Tree Canopy Coverage maps. HOLC's colored polygons, shaded green (Grade A) deemed as the "best" to red (i.e., redlined; Grade D) deemed "hazardous," were examined in concert with tree canopy coverage. A score of 1-5 was given to each outlined polygon based on tree canopy coverage (1=low, 5=high).

Results: Overall, areas that were redlined or given a grade C by HOLC had the lowest amount of tree canopy cover. Most of these areas lie in Latinx communities whereas non-redlined areas with higher amounts of tree canopy cover lie in more affluent areas.

Conclusions: These findings illustrate that there is a connection between institutionalized racist policies in the U.S. and accessibility of green space in Latinx communities. More studies are needed to further quantify environmental impacts.

Diversity and culture Environmental health sciences Public health or related laws, regulations, standards, or guidelines Public health or related public policy Public health or related research

