Green Heart Louisville — A Controlled Neighbourhood Tree-Planting Trial Measuring Residents' Health (USA)

PES & Nature-Based Solutions · Good practice · United States of America

Quality score: 27/100

Evidence strength: Cautionary / limited

Summary

South Louisville planted 8,000+ trees and shrubs (2019–2022) in treated neighbourhoods, with untreated ones nearby as controls. The 745 residents studied in greened areas had 13–20% lower hsCRP, a marker of inflammation. The air-pollution analysis is still under way.

Key dimensions

Dimension	Score
Carbon — sequestration / storage, evidenced	1/3
Biodiversity — conservation / improvement, evidenced	1/3
Water & soil — retention, infiltration, erosion control	0/3
Fire resilience — risk reduction, evidenced	0/3
Governance, certification & transferability	2/3

Evaluated by C-NAPSE

Data sources

C-NAPSE web research — accessed 2026-11-11

University of Louisville Envirome Institute & The Nature Conservancy — accessed 2026-11-11

University of Louisville — Green Heart results (2024) — accessed 2026-11-11

ScienceDaily — reduced inflammation after trees added — accessed 2026-11-11

NBC News coverage — accessed 2026-11-11

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