Vulnerable Communities & Urban Heat Stress: An Analysis On Climate Adaptation Planning & Research

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Abstract : Climate change poses significant threats to urban communities, with marginalized populations often disproportionately affected by environmental hazards. While urban climate adaptation planning research and initiatives are increasing, these efforts often fail to adequately address vulnerable communities. This paper explores the intersection between climate adaptation planning, particularly in response to heat-related environmental hazards, and underrepresented urban communities. This project will adopt a exploratory sequential design methodology which will predicate on a content analysis of academic research, white papers, and other content related to climate adaptation. Additionally, a spatial analysis will be conducted for all case studies included in the literature review. Analysis of geographic metadata and qualitative coding will refine research questions' scale and scope. This is especially true for literature that will be filtered to include heat-related environmental hazards. Ultimately, one can hypothesize that findings will further prove how current urban spatial politics create, perpetuate, or worsen uneven vulnerability to heat-related hazards. Lastly, the project aims to learn more about climate adaptation planning in order to implement more efficient and equitable sustainable transitions.

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Keywords : urban & regional planning, environmental justice, climate adaptation, heat stress

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