# Unearthing the role of soils in urban climate resilience planning – a commentary









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#### Introduction

- **Urban soils are essential infrastructure** providing hydrology, pollutant attenuation, vegetation support, and other critical ecological services
- Urban soils are often **framed and managed as a hazard** in resilience planning, excluding the potential of soils as an amenity
- How do we broaden the framing of urban soils in resilience discourses to realize their full potential as essential infrastructure?

#### Methods

• Conducted a preliminary review of resilience plans for the 50 largest cities in the United States, to assess how urban soils are framed.

### Results & Conclusion

- Widespread negative framing of urban soils and heavy focus on contamination/remediation across policy documents & literature
- General lack of emphasis on urban soils management principles or value, with some exceptions despite easily accessible contradictory evidence
- Benefits of soil are unrealized and underutilized due to negative framing

## Key Recommendations

- Reframe soils in municipal planning and management from simply hazardous to an integral part of infrastructure for climate resilient cities
- Remediate hazardous soils with the goal of transforming them into amenities
- Ensure benefits of soils are fairly distributed through an equity-centered approach by recognizing root causes of unjust systems and inclusive planning
- Greater funding for active management of soils is needed, as most urban soils-funding is focused on cleanup of contaminated industrial sites
- Enhance investment for soil resilience and health such as: increased funding streams, robust monitoring research, and comprehensive localized policies

Amenity

The benefits of soils are distributed inequitably. Exclusive decision-making, limited resources and siloed framing must be overcome to provide a pathway towards more resilient futures.

Equitable access to healthy soils and services that support climate-resilient futures.

Hazard

The potential of soils to serve as an amenity and promote climate resilience is inhibited by contamination, exclusive decision-making, limited resources and siloed framing.

While soils pose a hazard, equitable access to decision-making processes and resources, and influence over remediation practices provide a pathway towards more resilient futures.

Inequitable processes
Siloed framing
Insufficient support

Equitable processes

Social-ecological systems framing

Sustained investment