



# **New York City Urban Soils Institute**

**Your one-stop shop for all your urban soils  
needs**

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An aerial map of New York City and its surrounding areas, including Long Island Sound and the Hudson River. The map is color-coded: green represents forested or undeveloped land, blue represents water bodies, and brown/tan represents urban and developed areas. The city of New York is the central brown area, with Long Island to the east and the Hudson River to the west.

# **A Little Bit About NYC**

- **305 square miles**
- **~70% impervious cover**
- **>550 miles of waterfront**
- **8.5 million residents**



# **Urban Conservation**

- **Habitat restoration**
- **Parks**
- **Green infrastructure**
- **Community gardens**
- **Urban agriculture**
- **Brownfields**



# NEEDS

- **Increase in interactions with soils**
- **Large gap between the needs and resources**
- **Requests for analytical services, data, information, and more**
- **Lack of coordinated effort & knowledge**
- **lack of expertise and human resources**

# Core Partners







# **Our Vision**

**Soils and the life they support are built into all urban development and to incorporate the development of urban soils into the legacy landscapes that urban centers hope to preserve and sustain.**

# Mission

**To advance the scientific understanding and promote the sustainable use of urban soils through education, conservation, and research for diverse audiences.**



# **Four Division of USI**

**Soil Testing  
& TA**

**Education  
& Outreach**

**Data  
Depository**

**Research**



# **Long Term Goals**

- **Premier institution for all urban soils resources in NYC**
- **The center for urban soil research in the world**
- **A model for other urban centers**



# **First Years**

- **Committed resources from the founding partners**
- **Assignment of full time SWCD employee as Director**
- **Prioritize a few divisions**
- **Grants and Contracts**



# **Current Service**

- **Analytical lab facilities at Brooklyn College**
- **Soil testing and interpretation**
- **On-site technical assistance**
- **Workshops & supplemental courses**
- **Data interpretation**
- **Internship program**



# Soil Testing

- **XRF Test for Pb, As, Cu, Zn**
- **pH**
- **Soil textural classifications**
- **Total soluble salts**
- **Organic content**
- **NPK**
- **Test packages for multiple parameters**





# Clients

- **Community & home gardeners**
- **City agencies: DEP, Parks, Planning**
- **Non-profit organization: Brooklyn Botanic Garden**
- **Housing agencies: NYCHA**
- **Private developers**



# **In the Works**

- **Formal internship and job training program**
- **Larger and more diverse customer base**
- **Lab infrastructure upgrade**
- **Lab technician**
- **More resources – people & money**





# **In the Works**

- **Urban Soils Workshops**
- **Information Dissemination System and Online Resources**
- **Soils Interpretation Service**
- **Urban Soils Symposium**
- **Soils Exhibits**
- **Urban soils courses for CUNY and Continuing Ed**



# Who we are

**NYCSWCD**

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