Metropolitan Washington, D.C. Green Infrastructure Mapping Assessment

Theodore S. Eisenman, University of Massachusetts - Amherst

This work is licensed under a Creative Commons CC_BY-NC International License.

Available at: https://works.bepress.com/theodore-eisenman2/16/
Metropolitan Washington, D.C.
Green Infrastructure Mapping Assessment

Phase I:
Identifying green infrastructure mapping activity and needs through key informant interviews

Funded by
Metropolitan Washington, D.C.
Green Infrastructure Demonstration Project

Sponsored by
National Park Service National Capital Region
The Trust for Public Land
Center for Neighborhood Technology

Produced by
Theodore Eisenman, Principal
Environmental Design & Communications
1971 (Gum Springs Farm)
Silver Spring, MD
**Gum Springs Farm**
Silver Spring, MD

1936

2000

Fig. 1: Courtesy of Washington, D.C. Council of Governments and the Maryland-National Capital Park and Planning Commission.
Gum Springs Farm
Silver Spring, MD

1971

2005
The Challenge: According to the Metropolitan Washington, D.C. Green Infrastructure Demonstration Project, the D.C. region will lose 28 to 43 acres of open space *everyday* from 1997 to 2020, to various types of development.

**Fig. 3**: Percent tree cover in the District of Columbia, *Courtesy of American Forests.*
One Solution: "Elevate ecological landscape features as primary ordering elements in the planning and building of communities, cities, and regions . . ."

**Green Infrastructure**

“Just as growing communities need to upgrade and expand their built infrastructure of roads, sewers, and utilities, they also need to upgrade and expand their green infrastructure, the interconnected system of green spaces that conserves ecosystem values and functions, cleans air and water, and provides an array of benefits to people and wildlife. Green infrastructure is a community’s natural life support system, the ecological framework needed for environmental and economic sustainability.”

- American Planning Association, 2003
This assessment seeks to:

- Identify existing green infrastructure mapping Activity and Capacity in the region;

- Identify green infrastructure mapping Gaps and Needs, from both a data and organizational perspective; and

- Identify key informant Recommendations for improving regional green infrastructure mapping and decision-making.
Methodology & Deliverable

- 25 first-person interviews with leaders and specialists (key informants) involved in green infrastructure mapping, including experts from non-profit conservation groups, academic institutions, and public agencies.

- Organized in three sections:
  - Local Partners;
  - Regional Partners; and
  - Advisory Partners.

- Findings are provided in narrative summaries organized in four parts:
  - Existing GI activity and capacity;
  - Gaps and needs;
  - Recommendations; and
  - Reference to existing GI data and maps.

- Conclusions & Recommendations.

- A summary identification and description of sample green infrastructure data sets and data dictionaries is provided in Appendix A.
Conclusions

1. A Strong Foundation

- The region has a strong GI mapping foundation through the methodologies and assessments of the Chesapeake Bay Program Resource Lands Assessment, Maryland's GreenPrint program, and Virginia's Natural Landscape Assessment (slated for completion in 2006).

- Interstate and statewide GI plans can support regional, state, and county-level planning and protection efforts by providing context for local concerns and by identifying significant features of regional and statewide importance.

- Most GI mapping has focused on biodiversity and habitat conservation, using the “Hubs and Corridors” approach based on landscape ecology.
Hubs & Corridors

Cores are unfragmented natural cover with at least 100 acres of interior conditions.

* Courtesy of the Chesapeake Bay Program & Maryland Department of Natural Resources
Hubs are groupings of core areas bounded by major roads or unsuitable land cover.

* Courtesy of the Chesapeake Bay Program & Maryland Department of Natural Resources
Corridors link hubs and allow animal, water, seed and pollen movement between hubs.

* Courtesy of the Chesapeake Bay Program & Maryland Department of Natural Resources
Conclusions

2. Integrate Cultural Values

• Many key informants expressed a need to integrate urban, suburban, and rural cultural values into GI identification and mapping, while preserving the integrity of existing landscape-ecology based methodologies.

  - “We need green infrastructure definitions that address cultural needs in a suburban setting, such as open space per capita, proximity, links to regional systems, access, and preserving a diversity of landscapes such as working landscapes and rare forest stands.”

  - ”Green infrastructure has to address the places where people live, including working landscapes, recreational parks, and greenways.”

  - “Green infrastructure cannot become something that you get in your car to go see.”
Conclusions

3. Increase Collaboration

- The most recurring recommendation articulated by key informants addressed a need that can be broadly described as "improved collaboration and coordination of green infrastructure mapping and conservation activities across the region."

  - Increasing connectivity of GI parcels across county lines
  - Coordinating data collection and reducing costs
  - Sharing data and conservation strategies
  - Developing a regional GI strategy and organization
Recommendations

- Mapping
- Strategic Collaboration
- Advocacy
  - Public Education
  - Community Outreach
  - Communications
For further information contact:
J. Glenn Eugster, Assistant Regional Director
Partnerships Office
National Park Service
National Capital Region
(202) 619-7492
glenn_eugster@nps.com

Lead Consultant & Production:
Theodore Eisenman, Principal
Environmental Design & Communications
(267) 481-3453
teisenman2@mac.com