

# Green Infrastructure Mapping and Initiatives in the greater Washington DC region

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## Online Mapping

### Anacostia Watershed Database and Mapping Project

[restoreanacostia.gov](http://restoreanacostia.gov)

A GIS-based product that will map restoration projects in the watershed, along with contaminant data, watershed characteristics, fish advisories, water quality monitoring stations, and a number of other data layers. We eventually will have links to outside datasets and photos of projects available on the internet map server that will service this project.

*Extent:* Anacostia watershed -- MD and DC

Note: website not yet active. Additional contact: Lisa Pelstring. [Lisa.Pelstring@noaa.gov](mailto:Lisa.Pelstring@noaa.gov)

Current partners include U.S. Army Corps, Metropolitan Washington Council Governments, Anacostia Watershed Citizens Advisory Council, U.S. EPA, Montgomery County, and D.C. Govt. We invite others to participate.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

NOAA  
Kristin Rusello  
301 713 3038 x127  
[Kristin.Rusello@noaa.gov](mailto:Kristin.Rusello@noaa.gov)

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### Comprehensive Urban Ecosystem Studies (CUES) Prog

*Extent:* Baltimore/Washington DC metro area

The U.S. Geological Survey's Comprehensive Urban Ecosystems Studies (CUES) project utilizes local partnerships, USGS data, and science expertise to develop decision support tools and other practical applications to help meet critical needs facing 133 of the Nation's urban areas. CUES delivers these data layers and decision support tools via the internet through an internet map viewer. Issues addressed by CUES include vulnerability of water resources; natural hazards; consequences of urban growth, homeland security, and the conservation and protection of parks; wildlife refuges, and other natural resources.

Currently the CUES site is not available to the public, but should be viewable by all in February 2006.

We would be interested in combining USGS and other local entity datasets with the green-infrastructure data collected, developing web tools/ applications with the data, and making the data available to the public through CUES and a customized version of the Balt./DC CUES to be displayed on your website.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

USGS / Geography Discipline  
Cassandra Ladino  
703 648 6188  
[ccladino@usgs.gov](mailto:ccladino@usgs.gov)

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### DC GIS

[www.dcgis.dc.gov](http://www.dcgis.dc.gov)

*Extent:* DC

Use Internet Explorer to view site

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

DC OCTO-GIS  
Mario Field  
202 727 1761  
[Mario.Field@dc.gov](mailto:Mario.Field@dc.gov)

Metadata

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Contact: [DCGI\\_Collaborative@yahoo.co](mailto:DCGI_Collaborative@yahoo.co)

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## Online Mapping

### Maryland Environmental Resources and Land Information Network

Extent: MD

(MERLIN) [mdmerlin.net/](http://www.mdmerlin.net/)

An on-line mapping utility.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

MD Dept of Natural Resources  
Kenneth Miller  
410 260 8751  
kmiller@dnr.state.md.us

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### Maryland's Green Infrastructure Assessment

Extent: MD

<http://www.dnr.state.md.us/greenways/greenprint/>

A statewide identification and valuation system of ecologically important natural resource lands that are critical for maintaining an interconnected system, or network, of large "hubs" connected to each other by "corridors". The assessment was conducted, in part, to address the issue of forest fragmentation and loss of habitat for species dependent on forest interior conditions. The assessment produced several map layers to describe different characteristics of Maryland's Green Infrastructure. These include:

- 1) Delineation of hub and corridor network
- 2) Ecological valuation of hubs, corridors and 30 m cells within network
- 3) Delineation and ecological value of restoration opportunities to enhance existing network
- 4) Vulnerability assessment to determine areas within the network that were at the greatest risk of loss through development.

DNR's land conservation programs use quantitative parcel assessments of ecological value derived from the assessment to guide land conservation projects.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

MD Dept of Natural Resources  
Christine Conn  
410 260 8785  
cconn@dnr.state.md.us

Static:

<http://www.dnr.state.md.us/greenways/greenprint/orderform.html>. Dynamic: <http://www.mdmerlin.net>.

Downloadable data: <http://www.dnr.state.md.us/gis/>

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### MD DNR Geospatial Data Center

Extent: MD

<http://www.dnr.state.md.us/gis/>

A repository of natural resources data that can be used in GIS software. Downloadable data is accompanied by FGDC compliant metadata.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

MD Dept of Natural Resources  
Kenneth Miller  
410 260 8751  
kmiller@dnr.state.md.us

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### Washington DC Tree Map

Extent: DC

[www.caseytrees.org](http://www.caseytrees.org)

Online mapping system with tree data for Washington DC

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

Casey Trees  
Holli Howard  
202 349 1905  
hhoward@caseytrees.org

Data available by request

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Contact: [DCGI\\_Collaborative@yahoo.co](mailto:DCGI_Collaborative@yahoo.co)

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## Stewardship

### Anacostia Floodway Trees

[www.anacostiaws.org](http://www.anacostiaws.org)

Establishing 600 streambank trees, grown in a long row, along 3 miles of two Anacostia tributaries (NW Branch and NE Branch) which are currently devoid of trees due to being located inside a 1950's-era Army Corps of Engineers "floodway" project. This project is located in the greater Hyattsville/Riverdale Park, MD area.

*Extent:* MD -- Hyattsville/Riverdale Park

Purpose of project: Eventual canopy to shade the tributaries, which now bake in the summer sun, creating thermal pollution and loss of aquatic diversity and aesthetic improvement for the surrounding communities.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

Anacostia Watershed Society  
Steve McKinkdley-Ward  
301 699 6204  
[steve@anacostiaws.org](mailto:steve@anacostiaws.org)

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### Baltimore-Washington Partners for Forest Stewardship (BWPFS)

*Extent:* MD

A partnership between four (4) Federal land owning agencies in the BW metro corridor, MD DNR and the Center for Chesapeake Communities, a non-profit organization. Agencies include USFWS Patuxent Research Refuge, USDA Beltsville Agricultural Research Center, NASA Goddard Space Flight Center, US Army Fort Meade. Nearly 26,000 acres of contiguous land, much of it forested, are managed by these agencies. These lands comprise the last remaining large blocks of unfragmented forest in the BW corridor. The BWP seeks to promote comprehensive forest stewardship management plans, cooperative restoration projects and applied research to better understand the important air, soil, water, habitat and wildlife ecological services provided by these resources to the greater Baltimore Washington metropolitan community and the Chesapeake Bay watershed. The Partnership would like to collaborate with other adjacent landowners, public or private, as a means to broaden the base of protected and managed forest land in this region.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

MD Dept of Natural Resources  
Christine Conn  
410 260 8785  
[cconn@dnr.state.md.us](mailto:cconn@dnr.state.md.us)

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### Kingman Marsh re-vegetation

[www.anacostiaws.org](http://www.anacostiaws.org)

To reduce vegetative impacts by non-migratory Canada geese who are eating the marsh to oblivion. AWS also grows and transplants native wetland plants to "re-vegetate" the marsh after extensive, ongoing damage by Canada geese from 2001 to the present.

*Extent:* DC -- near Benning Rd/Anacostia River

An expected 2006 Environmental Assessment (NEPA process) led by the National Park Service in the surrounding community will determine, to a large extent, whether geese can be removed to alter the situation in an ecologically-positive way.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

Anacostia Watershed Society  
Steve McKindley-Ward  
301 699 6204  
[steve@anacostiaws.org](mailto:steve@anacostiaws.org)

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Contact: [DCGI\\_Collaborative@yahoo.co](mailto:DCGI_Collaborative@yahoo.co)

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## Stewardship

### Maryland Rural Legacy Program

Extent: MD

<http://www.dnr.state.md.us/rurallegacy/rlprogram/mapoptions.html>

Along with the MD forest legacy program, these two programs define discrete areas across the state of Maryland that are eligible for certain Federal and State land conservation funds and are priority areas for land conservation and stewardship activities. These areas are prioritized due to their ecological value and the contribution of these lands in support of rural working landscapes. The Rural Legacy Program is funded by State Program Open Space funding, while the Forest Legacy Program is funded by US Forest Service funding. Polygon data are available for these areas. Some mapped rural legacy and forest legacy areas are found within the broader DC metro region.

<http://www.dnr.state.md.us/rurallegacy/>

#### Features

- Static maps
- Dynamic maps:
- Data Download

Data available upon request

#### Contact

MD Dept of Natural Resources  
Pam Bush  
410 260 8428

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### Maryland Strategic Forest Lands Assessment

Extent: MD

<http://www.dnr.state.md.us/forests/planning/sfla/index.htm>

Maryland's Strategic Forest Lands Assessment (SFLA) is a geospatial assessment of the condition of Maryland's forests, the factors that affect their continued health and vitality and their ability to provide the multiple ecological, social and economic values relied on by the citizens of Maryland. Three raster-based map layers were developed that describe:

- 1) Forest ecological value (scale of 1 – 100, 100 most valuable)
- 2) Forest economic value (scale of 1-100, 100 most valuable)
- 3) Forest vulnerability (scale of 1-100, 100 most vulnerable)

Analysis currently being used to define Forest Legacy Areas that will be eligible for Federal land conservation funding.

DNR's land conservation programs use quantitative parcel assessments of ecological value derived from this assessment to guide land conservation projects.

#### Features

- Static maps
- Dynamic maps:
- Data Download

Static maps:

[http://www.dnr.state.md.us/forests/planning/sfla/index\\_r\\_list.htm](http://www.dnr.state.md.us/forests/planning/sfla/index_r_list.htm). Data available by request.

#### Contact

MD Dept of Natural Resources  
Christine Conn  
410 260 8785  
cconn@dnr.state.md.us

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### MD Comprehensive State Forest Assessment

Extent: MD -- Pilot focused on selected state forests.

Maryland is struggling to maintain forest ecological function and thriving working forests in the face of rapid urban development, forest fragmentation and parcelization. Information on forest composition and structure, ecological function, biodiversity, habitat and economic potential are crucial to the sustainability of Maryland's forests. This comprehensive forest assessment on 200,000 acres of State Forest land will aid in the third party "green certification" of these lands and serve as a model for the other 2.5 million acres of forestland in Maryland.

Assessment and mapping approaches may be applicable to DC metro region forests.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

MD Dept of Natural Resources  
Jeff Horan  
410 260 8520  
jhoran@dnr.state.md.us

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Contact: [DCGI\\_Collaborative@yahoo.co](mailto:DCGI_Collaborative@yahoo.co)

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## Stewardship

### MD DNR Greenways and Water Trails Program

Extent: MD

<http://www.dnr.state.md.us/greenways/greenprint/orderform.html>

The Greenways and Water Trails Program promotes the protection and creation of ecological and recreational corridors throughout Maryland. The goal of the program is to establish an interconnected, statewide network of greenways and land and water trails that preserve, protect and enhance Maryland's valuable natural treasures and provide opportunities for people to enjoy them.

#### Features

- Static maps
- Dynamic maps:
- Data Download

Downloadable data: <http://www.dnr.state.md.us/gis/>

#### Contact

MD Dept of Natural Resources  
Lisa Guterrez  
410 260 8778  
lgutierrez@dnr.state.md.us

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### MD Forest Legacy Program

Extent: MD

<http://www.dnr.state.md.us/forests/programapps/legacy2.html>

Along with the MD rural legacy program, these two programs define discrete areas across the state of Maryland that are eligible for certain Federal and State land conservation funds and are priority areas for land conservation and stewardship activities. These areas are prioritized due to their ecological value and the contribution of these lands in support of rural working landscapes. The Rural Legacy Program is funded by State Program Open Space funding, while the Forest Legacy Program is funded by US Forest Service funding. Polygon data are available for these areas. Some mapped rural legacy and forest legacy areas are found within the broader DC metro region.

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

MD Dept of Natural Resources  
Patrick Meckley  
410 260 8508  
pmeckley@dnr.state.md.us

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### USDA Forest Service Northeastern Area Forest Sustainability Criteria and Indicators

Extent: Northeastern US

The USDA Forest Service Northeastern Area and the Northeastern Area Association of State Foresters have made a commitment to track a base set of forest sustainability indicators that are consistent with the criteria and indicator framework measured at the national level. Criteria define broad categories of sustainability and indicators are specific measurements of each category. There are many benefits for tracking common forest sustainability indicators.

A criteria and indicators steering committee and three task groups made up of Northeastern Forest Resource Planners Association members and NA staff are working on reporting and implementation of the base indicators

#### Features

- Static maps
- Dynamic maps:
- Data Download

#### Contact

MD Dept of Natural Resources  
Jeff Horan  
410 260 8520  
jhoran@dnr.state.md.us

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Contact: [DCGI\\_Collaborative@yahoo.co](mailto:DCGI_Collaborative@yahoo.co)

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## Urban Green Infrastructure

### CapitalSpace

*Extent: DC*

Local/Federal Parks and Open Space Comprehensive Plan

Just beginning. Materials, maps expected summer/fall '06. Additional Contact: Chris Shaheen, DC Office of Planning, Chris.Shaheen@dc.gov, 202 442 7600

*Features*

- Static maps
- Dynamic maps:
- Data Download

*Contact*

NCPC  
Jeff Hinkle  
202 482 7200  
Jeff.Hinkle@ncpc.gov

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### DC Public Space Study

*Extent: DC*

Identify/analyze the District's public space review and permit process to assess current protection of open space and standards for providing new green infrastructure.

To be conducted Feb-July 2006, in collaboration with Office of Planning and DC Dept of Transportation.

*Features*

- Static maps
- Dynamic maps:
- Data Download

*Contact*

DC Office of Planning  
Chris Shaheen  
202 442 7600  
Chris.Shaheen@dc.gov

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### Growing a Greener Community

*Extent: DC*

Exploring the environmental, social and economic impacts of green infrastructure on DC

Just getting underway. Materials expected summer '06  
Additional contact: Chris Shaheen, DC Office of Planning, Chris.Shaheen@dc.gov, 202 442 7600.

*Features*

- Static maps
- Dynamic maps:
- Data Download

*Contact*

Jim Lyons  
Casey Trees  
202 833 4010  
jlyons@caseytrees.org

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### Guide to Green

*Extent: DC*

Resource guide for sustainable commercial development

Guide to be released in Spring '06.

*Features*

- Static maps
- Dynamic maps:
- Data Download

*Contact*

DC Office of Planning  
Zach Dobelbower  
202 442 7600  
Zach.Dobelbower@dc.gov

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**Contact: DCGI\_Collaborative@yahoo.co**

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## Urban Green Infrastructure

### Maryland Strategic Urban Forest Assessment (SUFA)

*Extent:* MD -- Annapolis, Baltimore, Frederick, Hagerstown, LaPlata

Fine-scale 1 m resolution satellite imagery has been collected for the five urban communities including Annapolis, Baltimore, Frederick, Hagerstown and LaPlata. The data have been analyzed, classified and mapped to indicate tree canopy cover and potential urban tree reforestation sites. The SUFA will be used by both Baltimore City and Annapolis to set an Urban Tree Canopy goal in support of the Chesapeake 2000 Agreement.

#### *Features*

- Static maps
- Dynamic maps:
- Data Download

Maps and data available by request.

#### *Contact*

MD Dept of Natural Resources  
Fred Irani  
410 260 8789  
firani@dnr.state.md.us

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### NoMA Grand Sustainability Study

*Extent:* DC

Exploring baselines, strategies & implementation methods for neighborhood/area wide sustainable systems

Just getting underway. Materials/maps expected summer '06.

#### *Features*

- Static maps
- Dynamic maps:
- Data Download

#### *Contact*

DC Office of Planning  
Patricia Zingsheim  
202 442 7600  
Patricia.Zingsheim@dc.gov

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Contact: [DCGI\\_Collaborative@yahoo.com](mailto:DCGI_Collaborative@yahoo.com)