

Appendix G

AGENDA

Crater Region Green Infrastructure Workshop

presented by:

The Crater Planning District Commission

1964 Wakefield Street
Petersburg, Virginia

Thursday, July 29, 2010
7:00 p.m. - 9:00 p.m.



- 6:45 p.m. Registration and Refreshments
- 7:00 p.m. Welcome and Overview
- 7:05 p.m. What is Green Infrastructure Planning?
- 7:10 p.m. Crater Region Green Infrastructure Planning
Victor Liu, Crater PDC
- 7:40 p.m. Ettrick/VSU Trail System
*Mike Golden, Director of Parks and Recreation,
Chesterfield County*
- 8:00 p.m. Colonial Heights Appomattox River Trail System (CHARTS)
*George Schanzenbacher, Director of Planning, City of
Colonial Heights*
- 8:20 p.m. Friends of the Lower Appomattox River (FOLAR) Greenway
System
Wayne Walton, Vice Chairman, FOLAR
- 8:40 p.m. Questions & Answers
- 8:55 p.m. Next Steps for the Crater Region Green Infrastructure Project
- 9:00 p.m. Adjourn



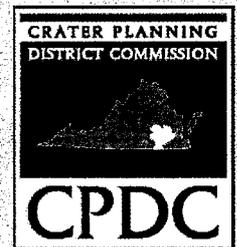
INVITATION

You are invited to:

Crater Region Green Infrastructure Workshop Thursday, July 29, 2010

presented by:
The Crater Planning District Commission

Please RSVP by Monday, July 19, 2010
Victor Liu: vliu@craterpdc.org
(804) 861-1666



When: Thursday, July 29, 2010 from 7:00 p.m. to 9:00 p.m.

Where: Crater Planning District Commission Conference Room
1964 Wakefield Street
Petersburg, Virginia 23805

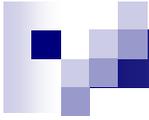
What: The Crater Planning District Commission has partnered with the Chesterfield County Parks and Recreation Dept., the Colonial Heights Appomattox River Trails System (CHARTS) and Friends of the Lower Appomattox River (FOLAR) to present green infrastructure projects for the Crater Region. Green infrastructure refers to natural assets, such as forests, rivers and working lands which we depend on to sustain healthful, vibrant communities.

This workshop will present three local projects which demonstrate how localities can develop a greenway system and conserve these assets by applying a community-based planning process.

Who: Local government representatives of the Crater Region, planners, planning commissioners, parks and recreation staff and commissioners, and citizen conservation organizations.

This project was funded by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA09NOS4190163 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

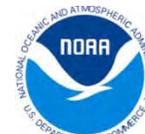




Crater Region



Green Infrastructure Planning



Robins Foundation



July 29, 2010



what

- Green Infrastructure
 - Defined
 - Benefits
 - Identification & Mapping

why

- Analysis
 - State Model
 - Asset Inventory Methodology
 - Prince George County Green Infrastructure Assets

how

- Planning for the Future
 - Existing Protection Measures
 - Opportunities
- Implementation

What is Green Infrastructure?

“**Strategically** planned and **managed** networks of natural areas, working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to human populations”

- Benedict, Mark A. and Edward T. McMahon. *Green Infrastructure: Linking Landscapes and Communities*. Washington, D.C.: Island Press, 2006.

Infrastructure (n): the substructure or underlying foundation...on which the continuance of growth of a community depends.

Gray



Green



Green Infrastructure Services



- Protection of water quality and supply
- Stormwater management, hazard mitigation
- Carbon Sequestration
- Air Quality Protection
- Temperature Moderation: Heat Island Effect



Green Infrastructure Services

- Preserves biodiversity and wildlife habitat
- Conserves historic landscapes
- Protects working lands, forests and farms
- Improves quality of life and fitness through access to recreation
- Preserves rural character





Some Economic Considerations...

- “Estimated value of all economic benefits generated by a single acre of wetland: \$150,000 to \$200,000”.
- “...every \$1 appropriated in the annual national parks budget, the national park system generates at least \$4 for state and local economies.”
- “...the estimated total value of the world’s ecosystems services is \$33 trillion annually.”
- “ ...when 60 percent of the watershed is forested, average annual (water) treatment costs are \$297,000. When only 10 percent is forested, average annual costs rise to \$923,450.”
- “The forestry organization American Forests estimates that trees in the nation’s metropolitan areas contribute \$400 billion in stormwater retention alone.”

The Inventory: Mapping Green Infrastructure Assets

- Working Lands

- Farms
- Forests
- Fisheries

- River & Stream Corridors

- Wetlands

- Marshes & Swamps

- Meadows & Pastures

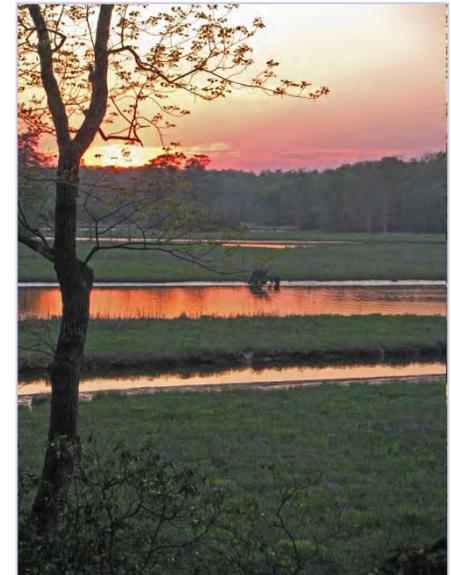
- Parks



Photo: Tom Rawinski / © DCR Natural Heritage



<http://www.vcu.edu/rice/natural/harrison.html>



<http://rivermud.blogspot.com/2009/04/chic-kahominy-river-fishing.html>



The Inventory: Mapping Green Infrastructure Assets



<http://www.jamesriverplantations.org/Westover.html>



<http://www.virginiacapitaltrail/html/>



<http://www.flickr.com/photos/andrewbain/2057004713/>

- ▶ Cultural Sites
- ▶ Historic Resources
- ▶ Trails
- ▶ Viewsheds
- ▶ Scenic Rivers
- ▶ Scenic Byways
- ▶ Watersheds
- ▶ Birding and Wildlife Trails

The Origins of the Project

- Coastal Zone Management Program Grant – Sustainable Communities
- Create a regional green infrastructure asset map and prioritized green infrastructure opportunities
- “Update” state model data



Green Infrastructure

- Two pronged approach:
 - City – Work with City of Richmond on a Green Infrastructure asset map; can be used as a model of other urbanized localities in the region
 - County – Work with New Kent County on a Green Infrastructure asset/planning guide; can be used as a model of other counties in the region.

The State Model

A photograph of a squirrel in mid-leap, moving from the left side of the frame towards the right. The squirrel is brown and white, with its tail tucked under it. The background is a dense forest of green trees, slightly out of focus, with some sunlight filtering through the leaves.

- Identification
- Inventory: Map existing assets
- Rank & Prioritize areas to protect
 - Function
 - Significance
 - Vulnerability

VA Conservation Lands Needs Assessment: Core Prioritization in Virginia

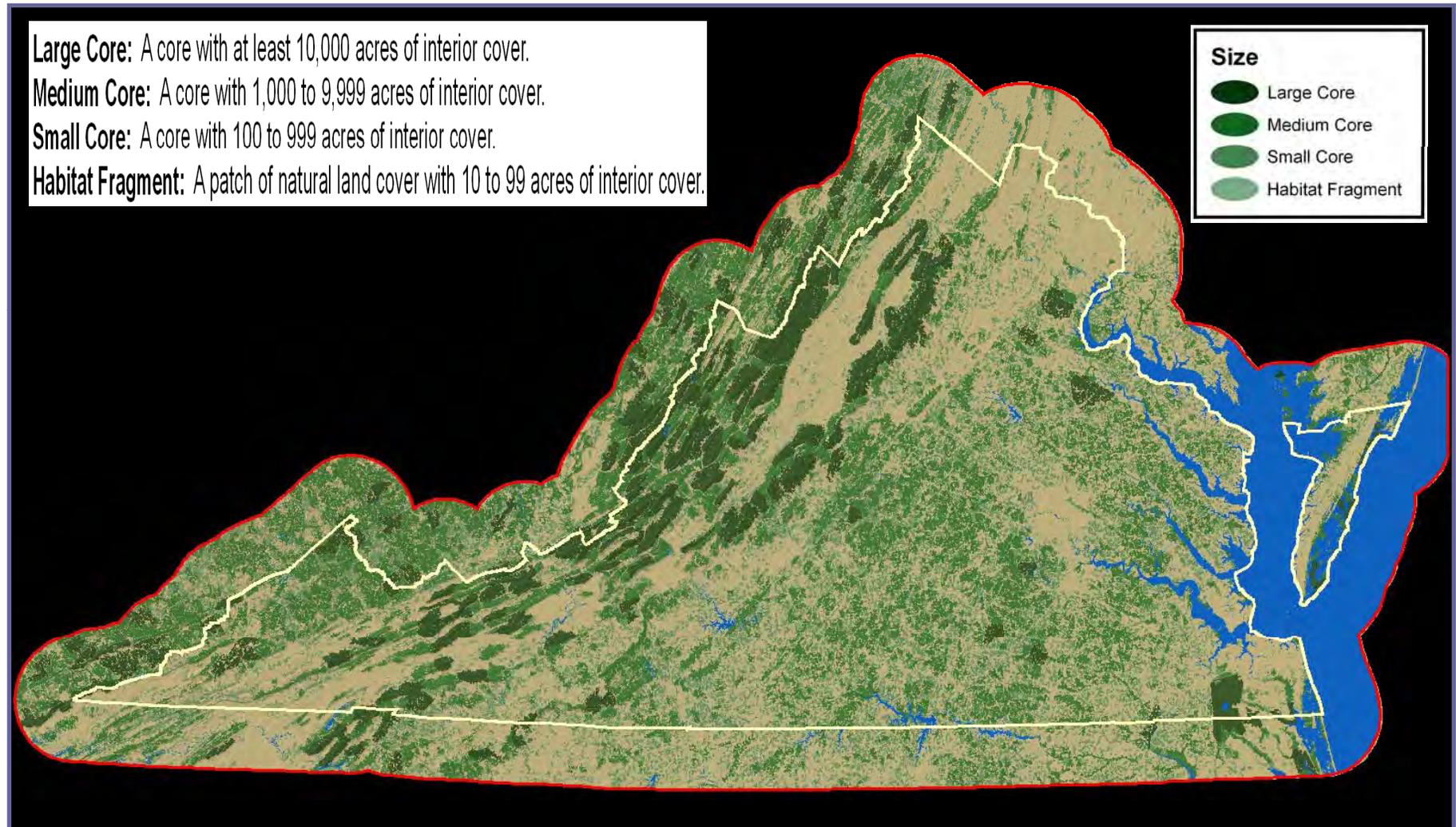


Image Courtesy VA Dept. of Conservation and Recreation

Ecological Composite Model = Ecological Integrity Ranking 1 - 5

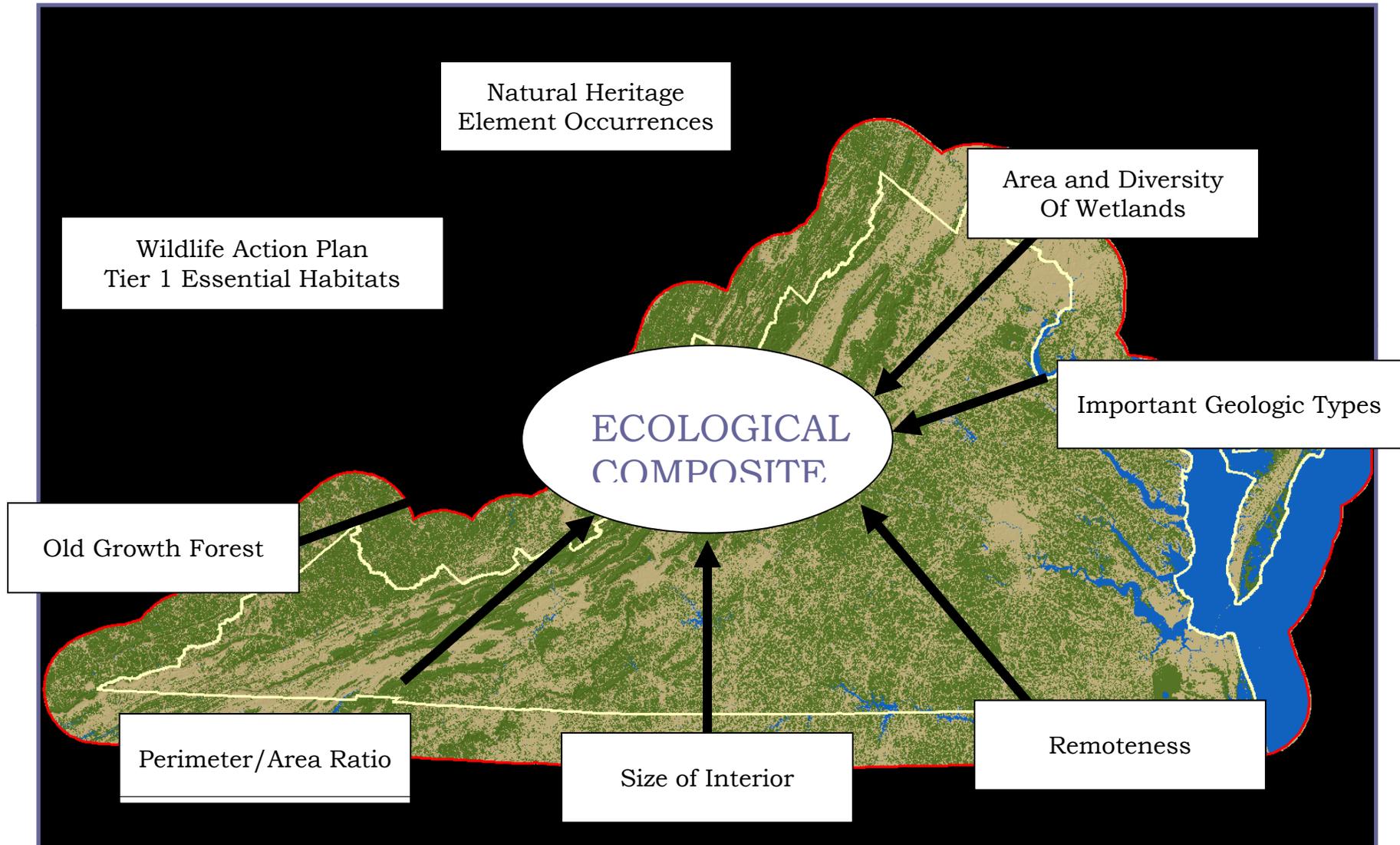
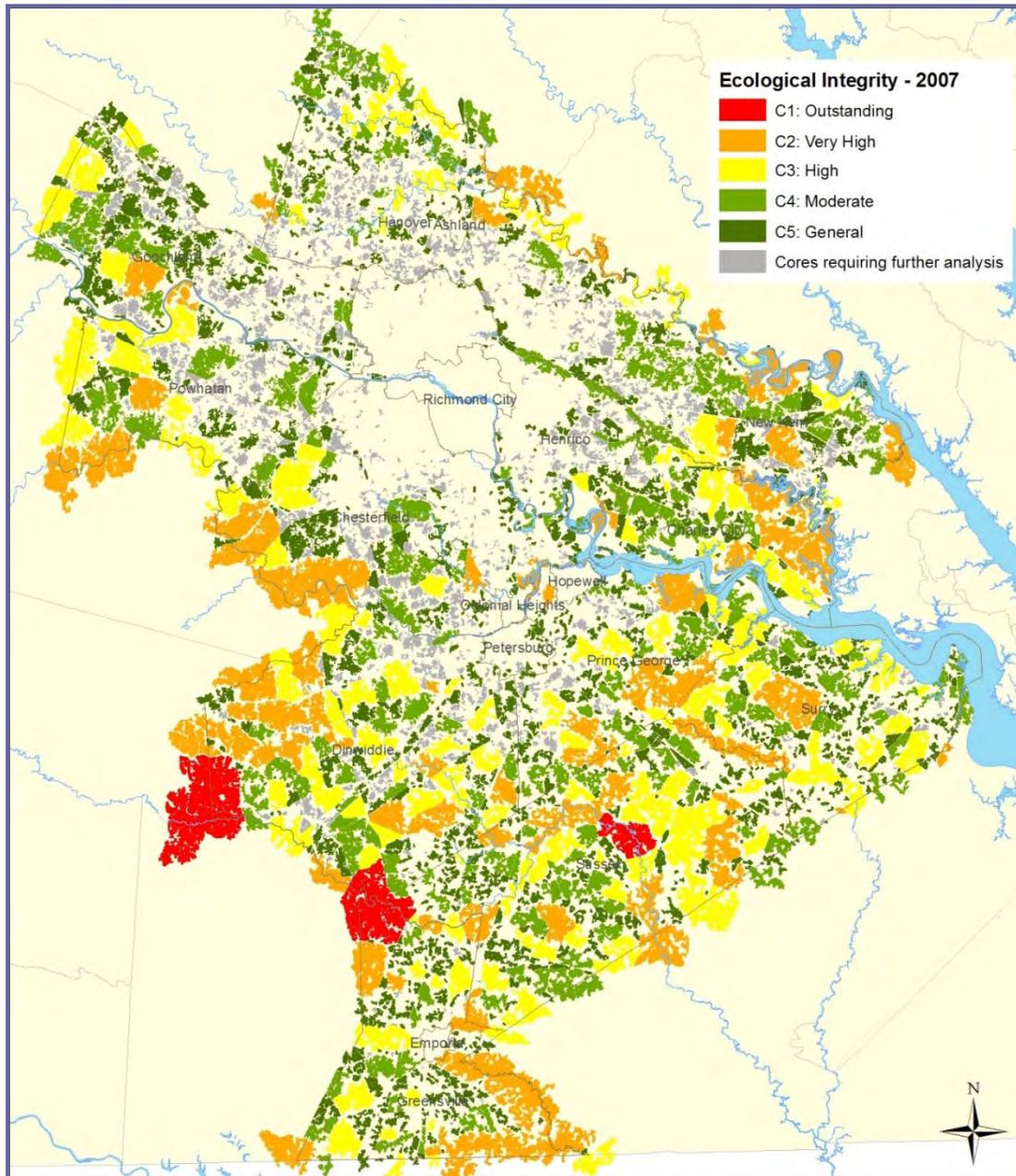


Image Courtesy VA Dept. of Conservation and Recreation

State Modeling Tools

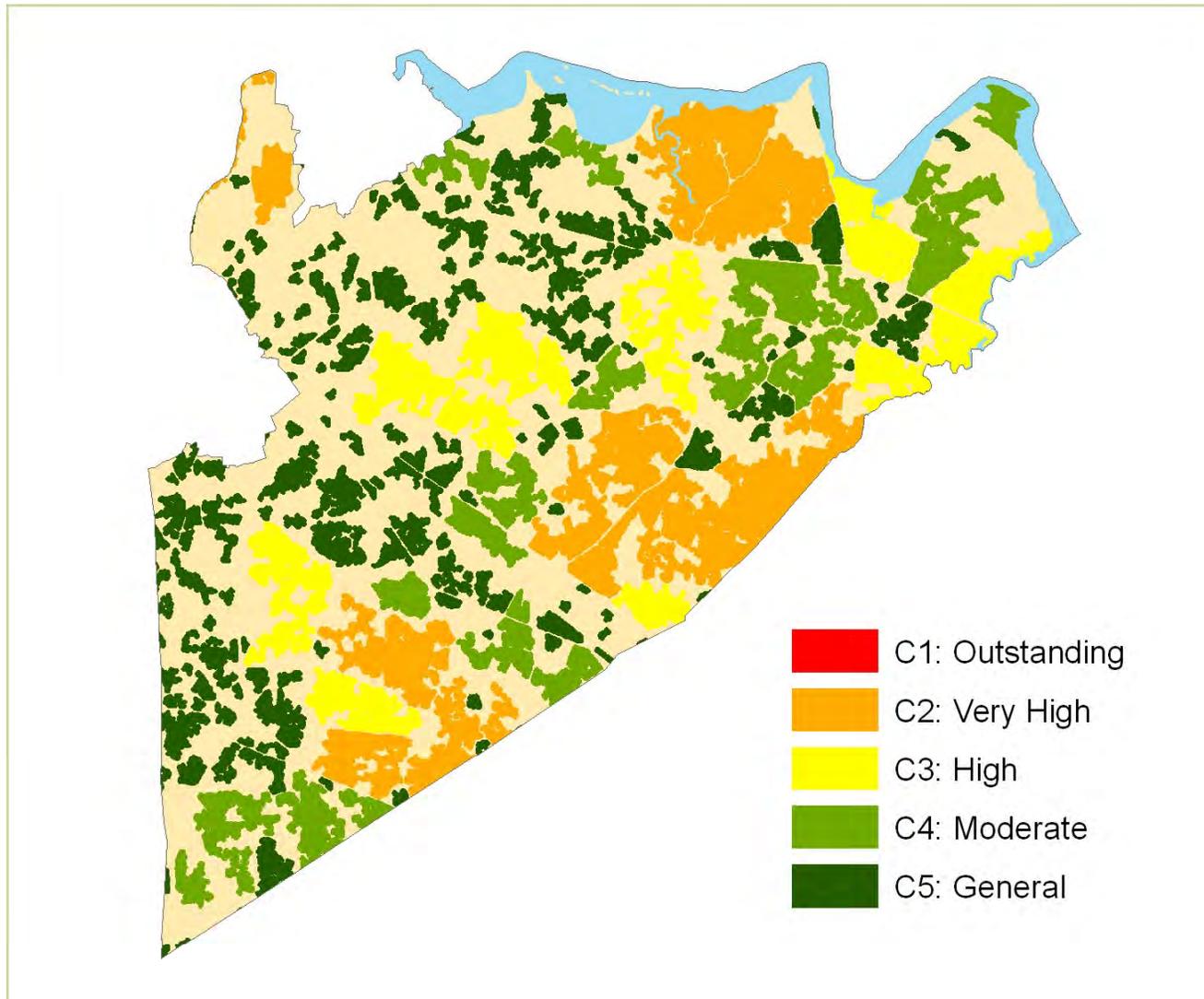
- VA Natural Landscape Assessment – Forest Habitats
- Cultural Model – Historic Resources
- Vulnerability Model – Growth Predictions and Trends
- Forest Economics Model – Economically viable forest
- Agricultural Model – Lands suitable for farming
- Recreation Model – Trails, Parks, Hunting and Fishing
- Watershed Integrity Model
- Ecological Integrity



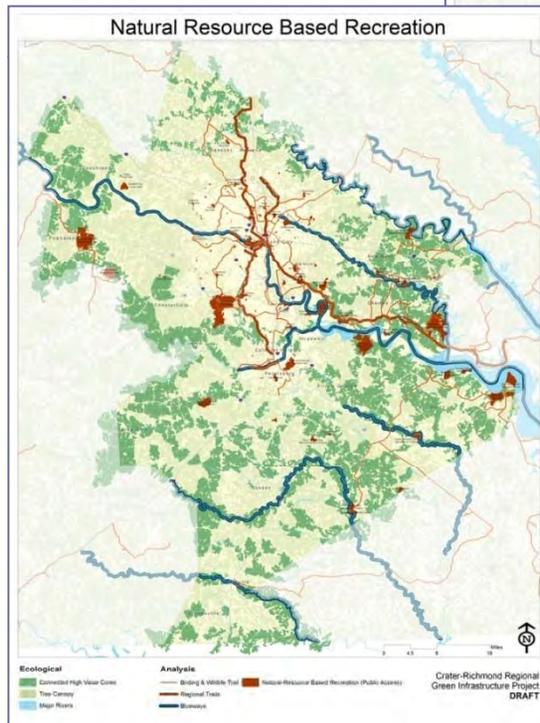
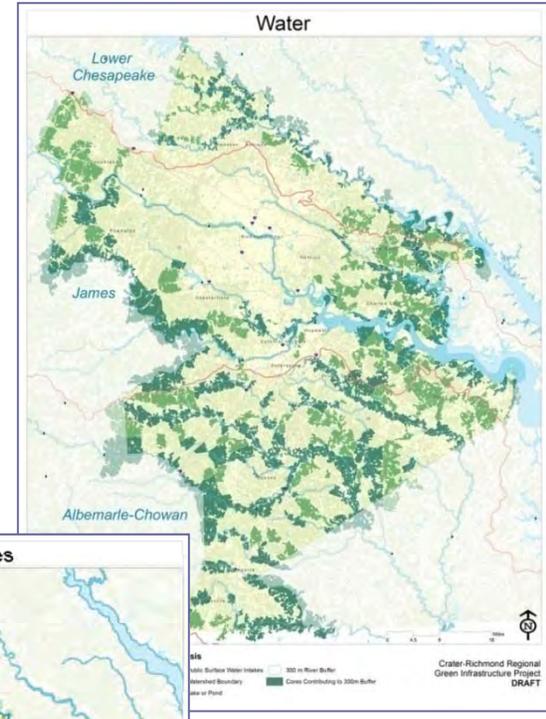
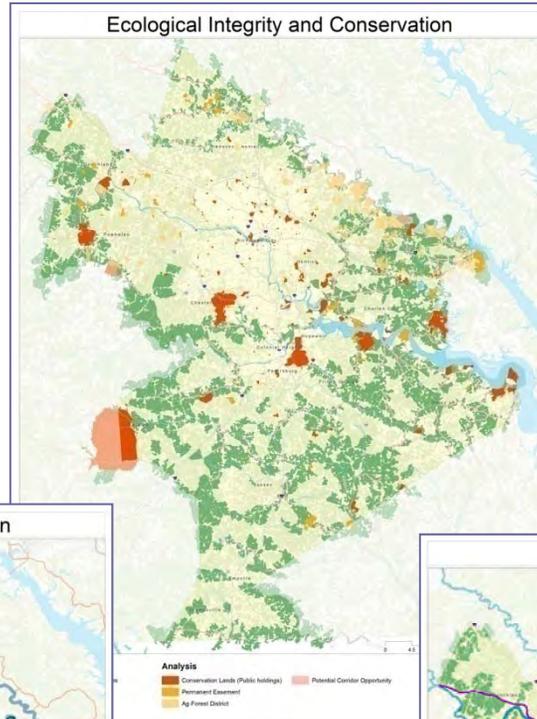


Richmond & Crater Region Intact Cores 2007

Prince George County Intact Cores 2007

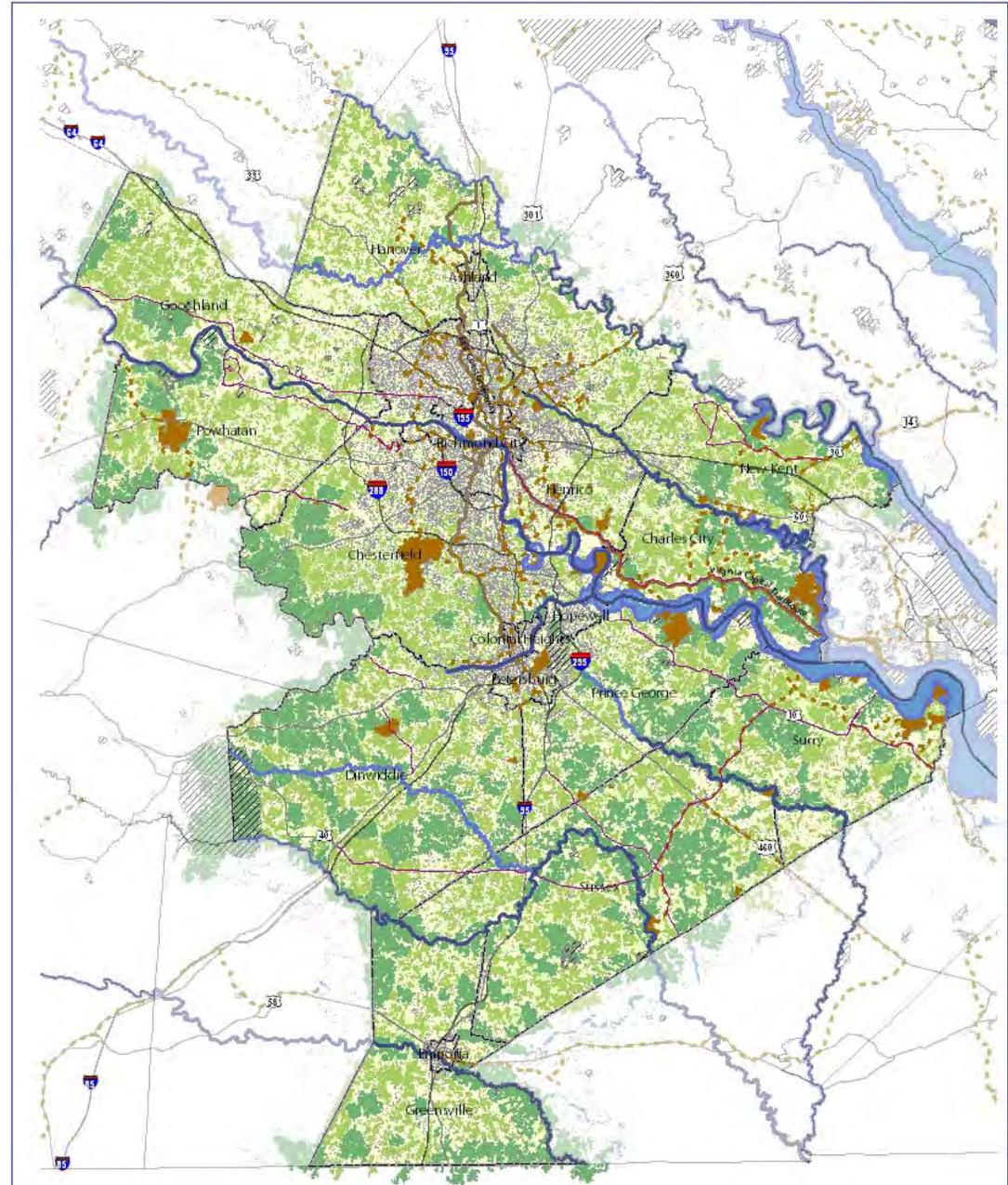
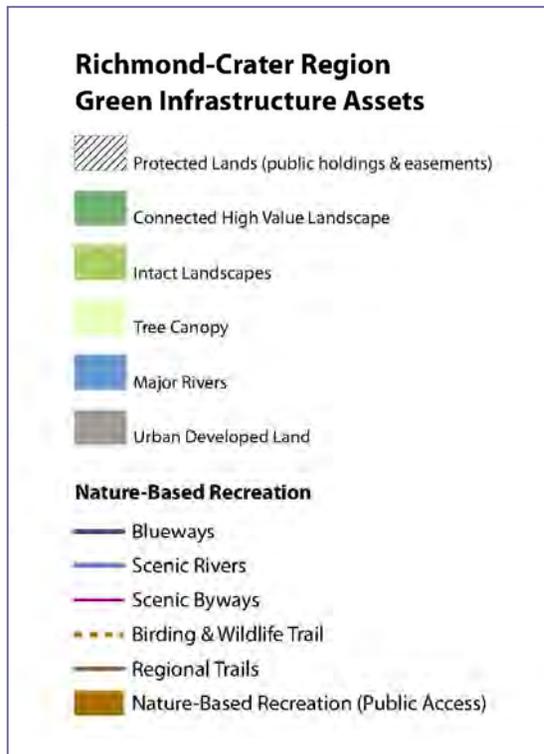


Theme Maps



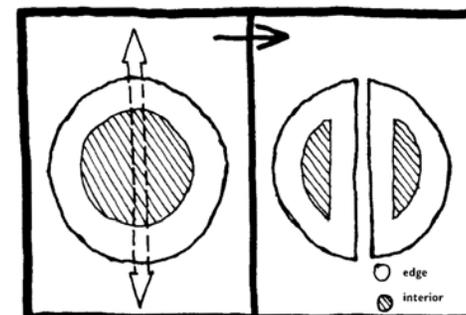
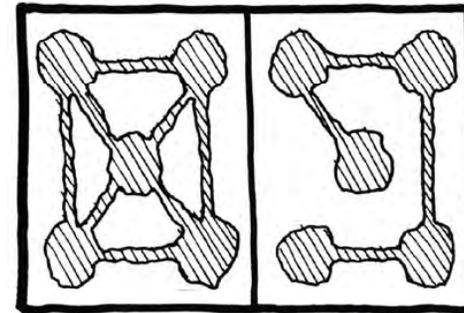
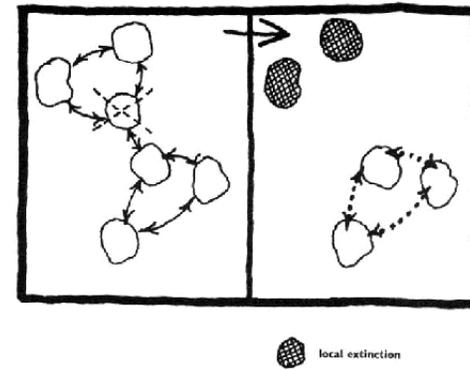
Crater-Richmond Regional Green Infrastructure Project DRAFT

Regional Green Infrastructure Assets

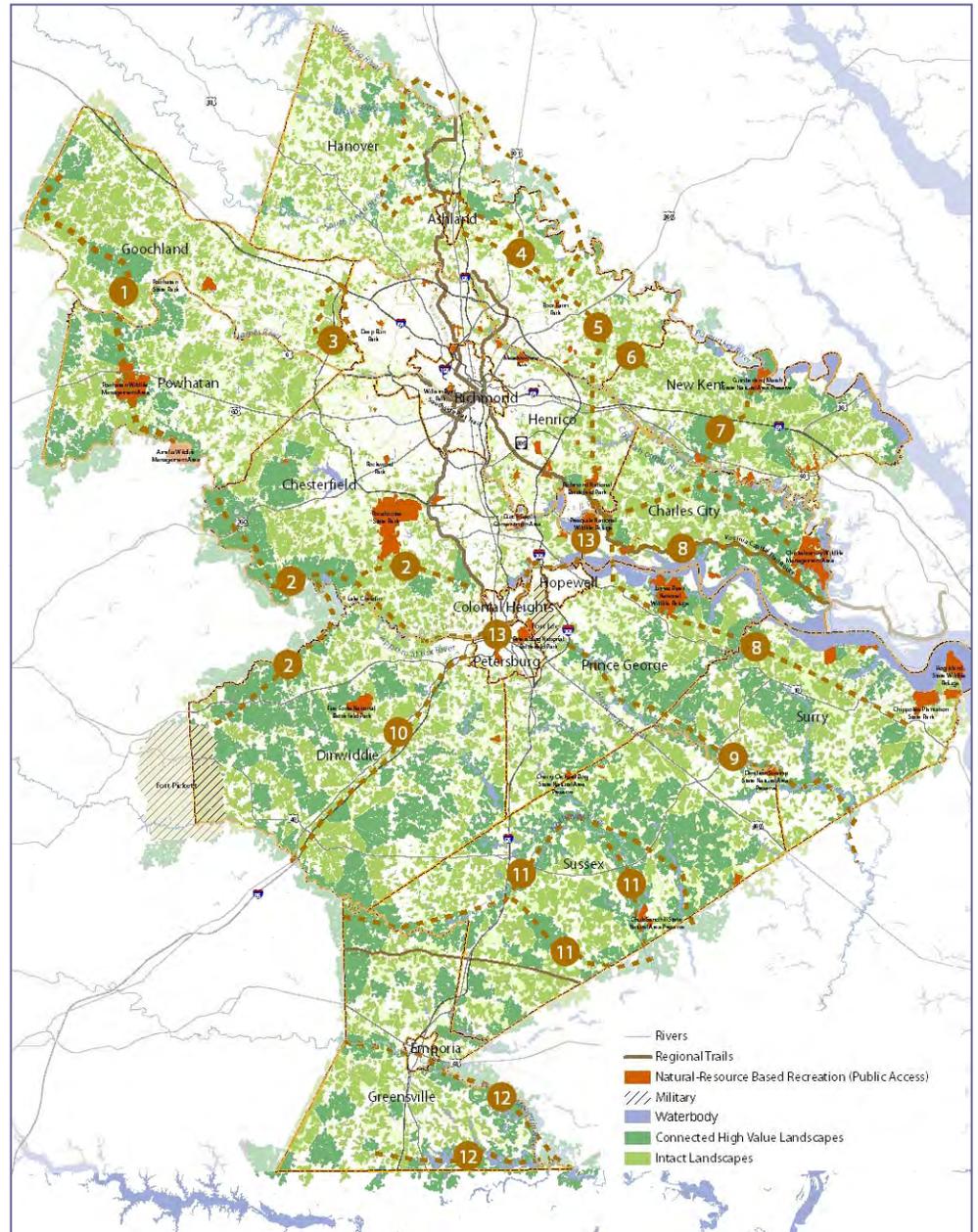


Connectivity is key...

- Removal of 1 patch causes habitat loss, habitat diversity loss, & potential reduction of population or localized extinction
- With habitat connections, more is always better
- Splitting of large habitats can have drastic effects on interior species

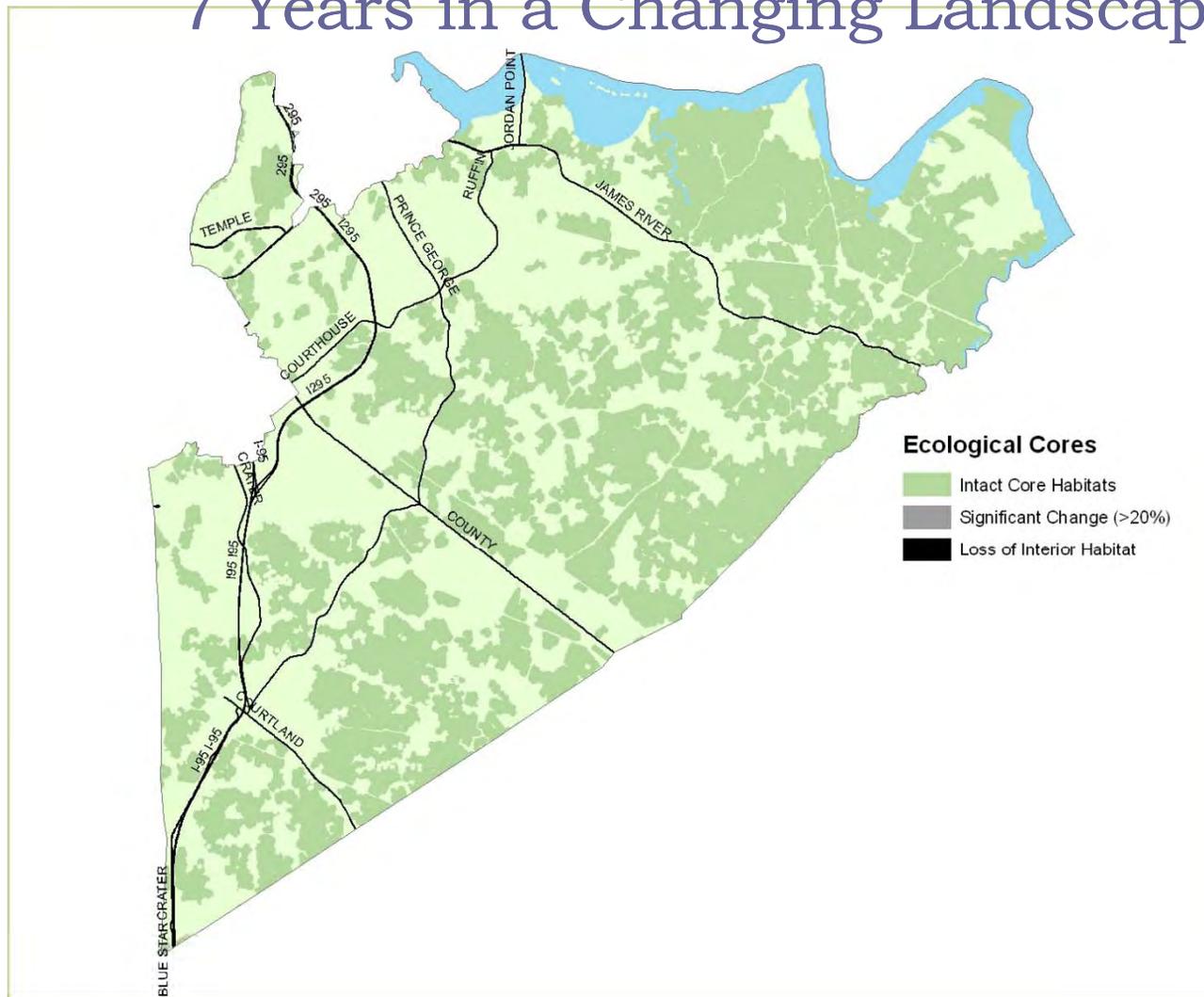


Regional Green Infrastructure Opportunities Map



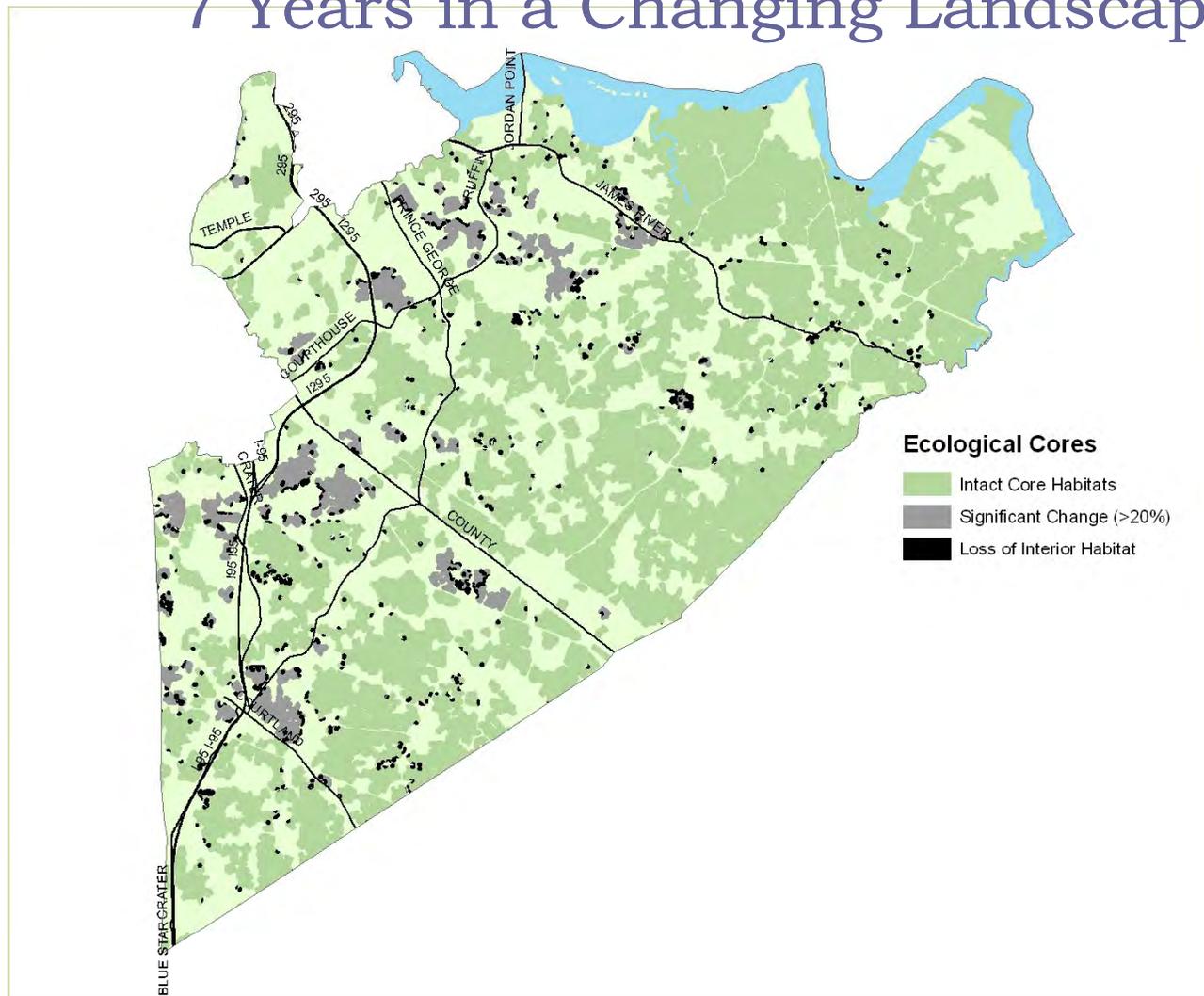
A Unique Opportunity:

7 Years in a Changing Landscape



A Unique Opportunity:

7 Years in a Changing Landscape

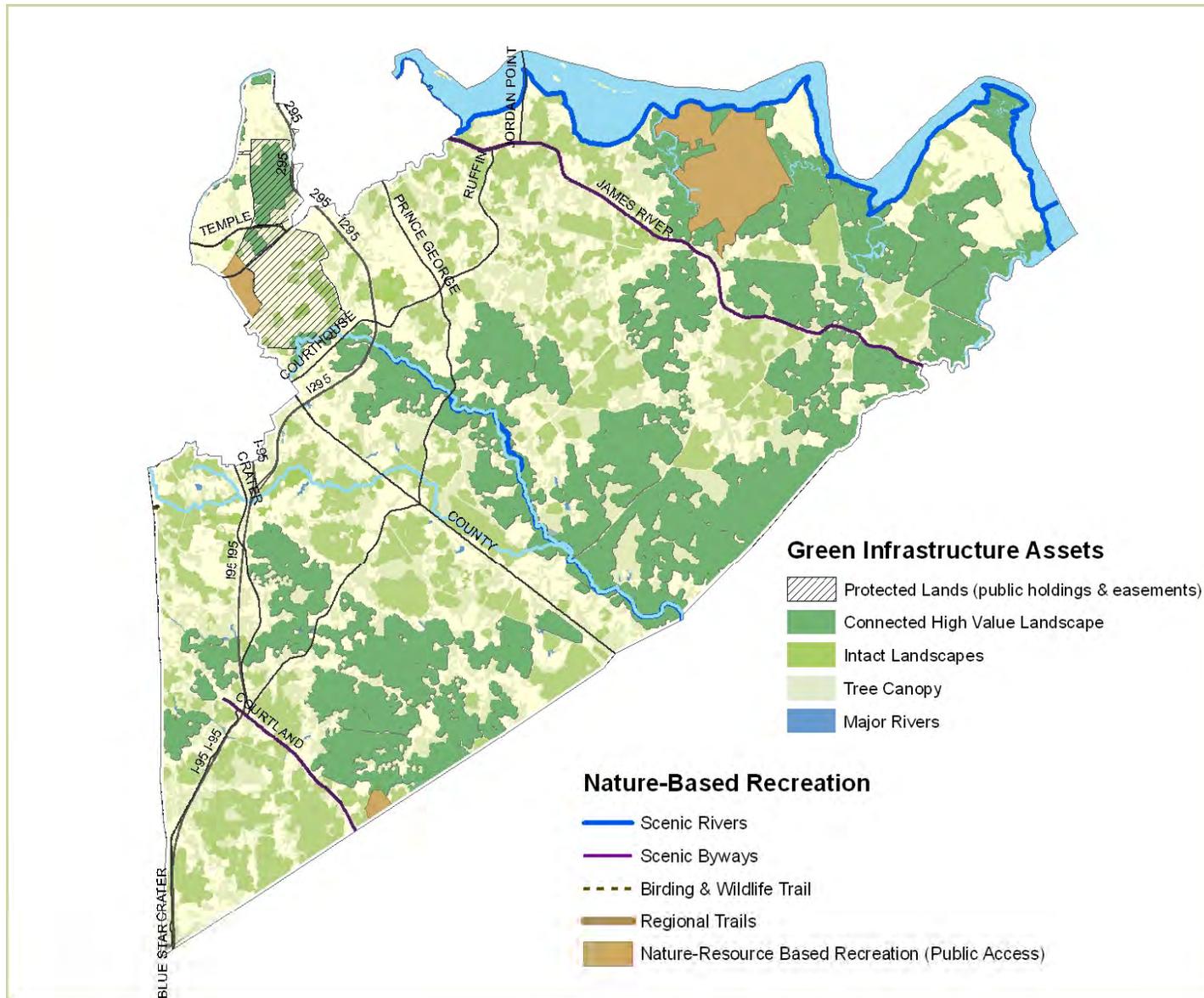




Steps for Local-Level Planning

- Phase I: Data Collection & Research
- Phase II: Asset Mapping (ecological, cultural, economic)
- Phase III: Risk Assessment (what assets at risk)
- Phase IV: Opportunities= what kind of community do we want? (what policies, programs, projects can be implemented?)
- Final Report: Asset maps, opportunities maps, strategies for localities to consider)

County Green Infrastructure Assets





Utility of Green Infrastructure Planning

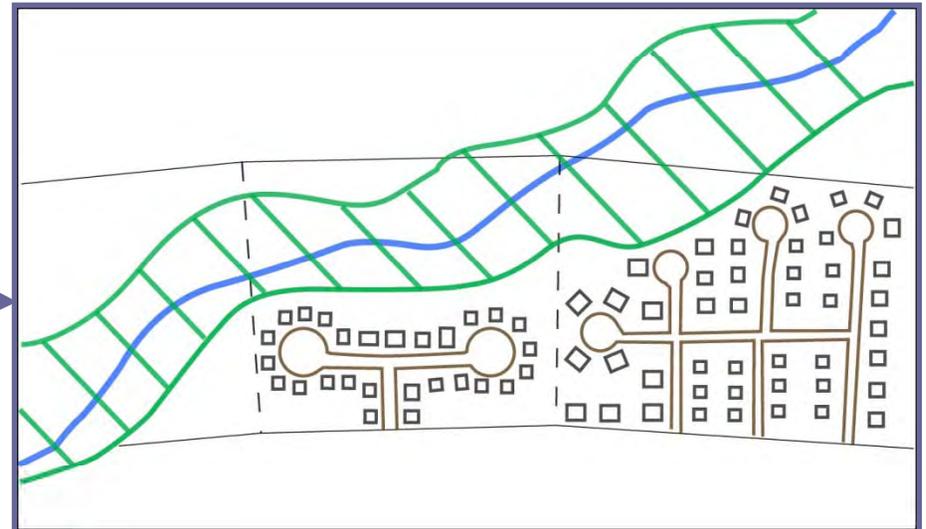
- Informing local comprehensive plans
- New ordinance development
 - Basis for up-zoning or down-zoning
- Trail, greenway, and blueway planning
- Park and open space planning
- Heritage tourism and viewshed protection
- Prioritizing lands for conservation
 - Purchase or Transfer of Development Rights Programs
 - Site design for cluster developments

Informing Land Use Decision-making



FRAGMENTED: Even well-intentioned land use planning approaches can result in the fragmentation of the county's high-value natural assets.

CONNECTED: A green infrastructure planning approach allows for development and growth at the same scale, while also ensuring that the county's natural assets remain intact and well-connected.



For more information, contact

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