

## Regional Green Infrastructure Base Map Development

5/15/2012

RRRC Land Use & Environment Committee

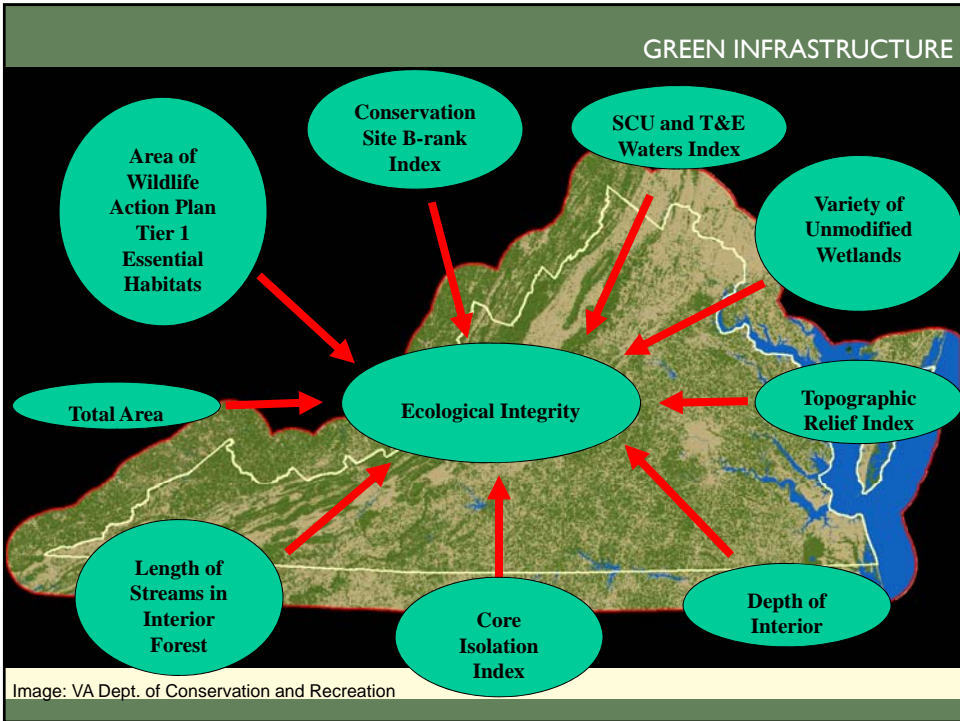
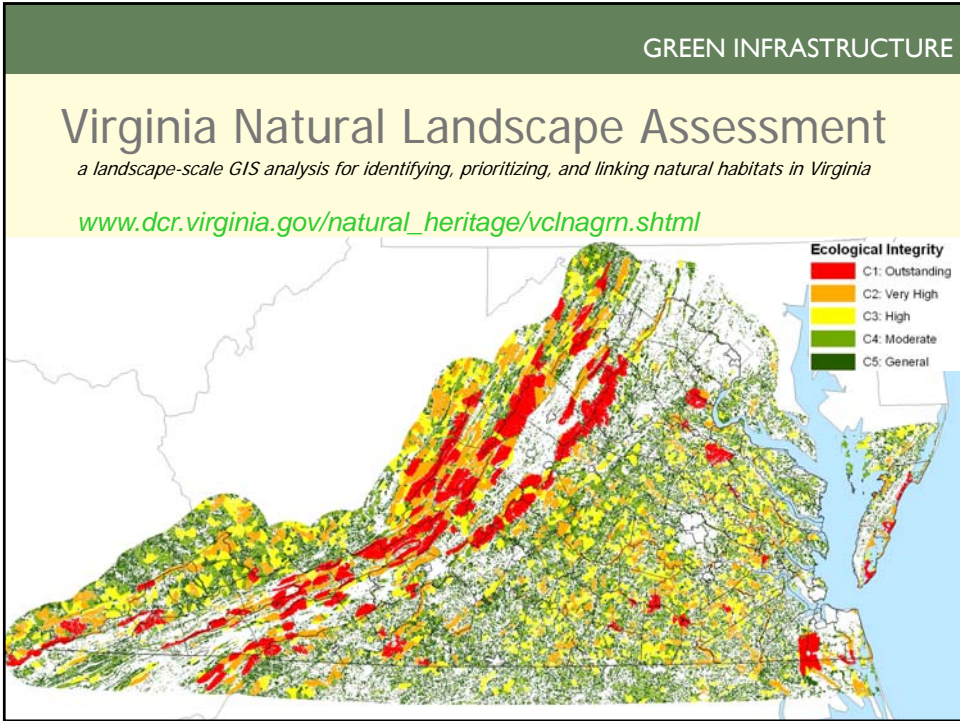


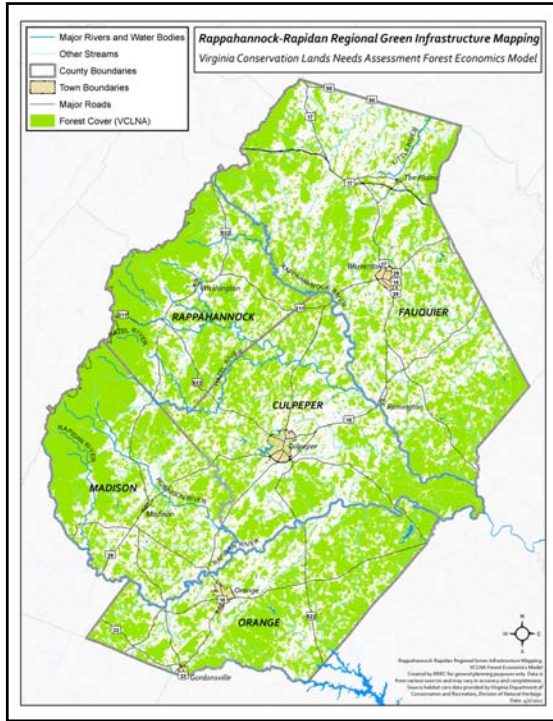
## New Virginia Modeling Tools

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

*For general information: [www.dcr.virginia.gov/natural\\_heritage/vclnagr.html](http://www.dcr.virginia.gov/natural_heritage/vclnagr.html)*

*For simple maps: <http://www.vaconservedlands.org/gis.aspx>*

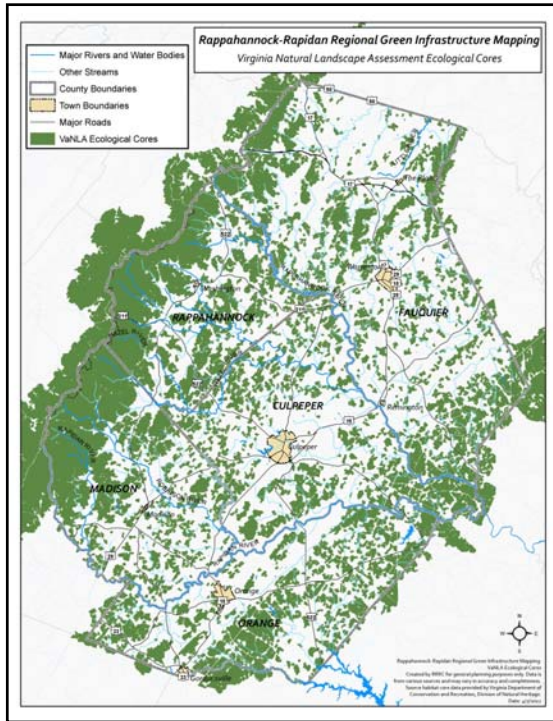




**GREEN INFRASTRUCTURE**

### 1. Forest Cover

Map shows Forest Cover in the region, according to VCLNA Forest Economics Model



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### 2. VaNLA Cores

All Ecological Cores from the Virginia Natural Landscape Assessment

Cores were updated by RRRC in 2012 to account for development in recent years. The method involved removing 100 meter buffers of E911 address points from the original VaNLA Core areas.

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### Method to Update Cores for Region Rankings

Acres of intact cores before buffer & clip: 740,700  
 Acres after buffer & clip: 734,373  
 Acreage in cores <10 acres: 16.4

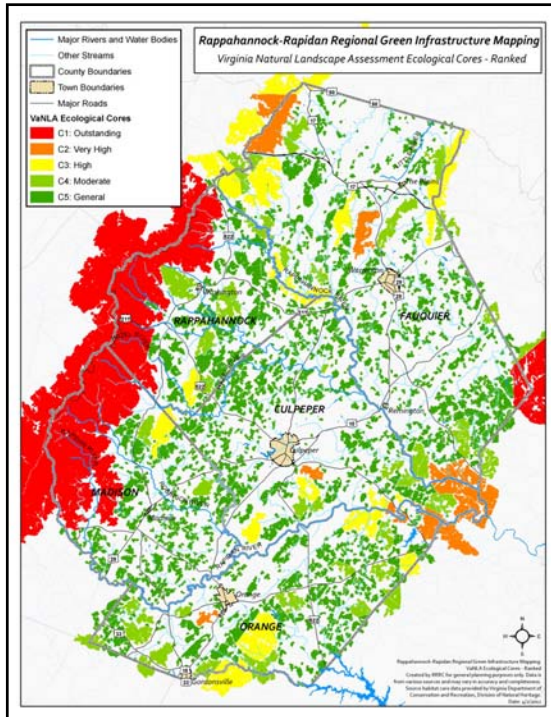


Total core acreage change (since 2000): ↓ 6,343.4 (-0.86%)

Total Number of Cores:

Before buffer & clip: 1,155  
 After buffer & clip: 1,576  
 # of cores <10 acres: 420

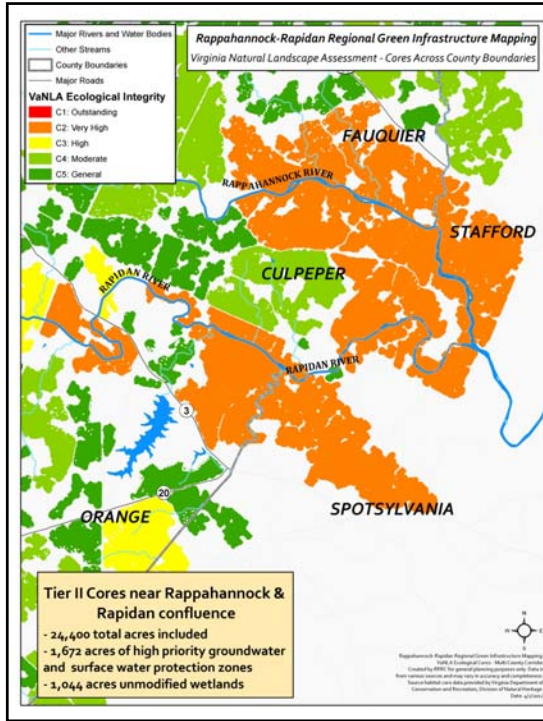
Note that cores which lost more than 20% in land area were C5, thus cores will not likely need to be reclassified since only lowest ranked cores lost area. The largest % drop in a higher-ranked core was just 3.4% in one C4 area. This is good news for conservation of the largest habitat and forest cores.



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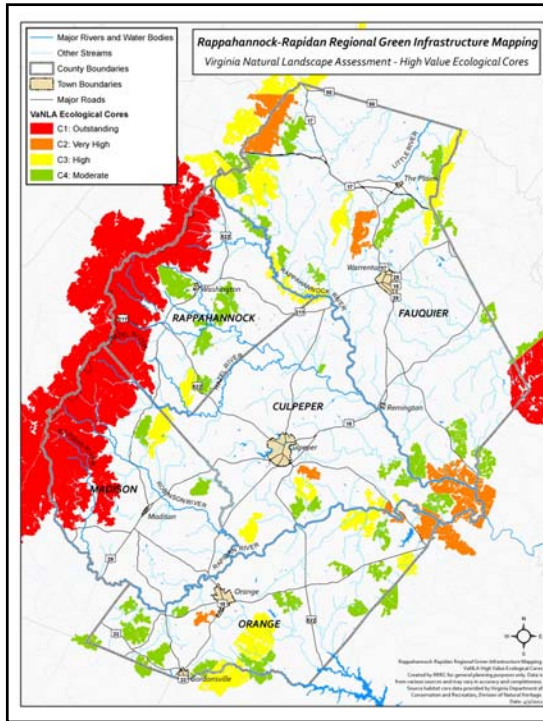
### 3. Updated VaNLA Cores Ranked by Ecological Integrity

Note: Cores are ranked on a statewide, rather than regional level



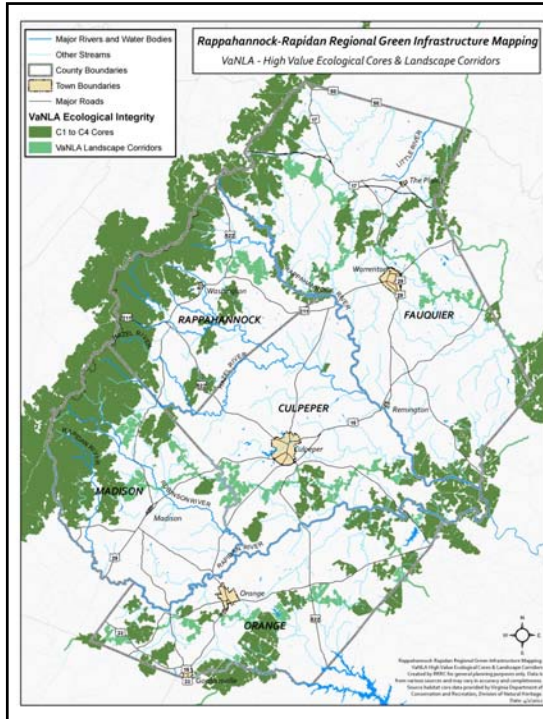
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4. Updated VaNLA Ecological Cores: Multi-Jurisdiction High Value Cores



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5. Updated VaNLA Cores - High Value Ecological Cores (C1 to C4)



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**6. Updated VaNLA - High Value Ecological Cores and Landscape Corridors**

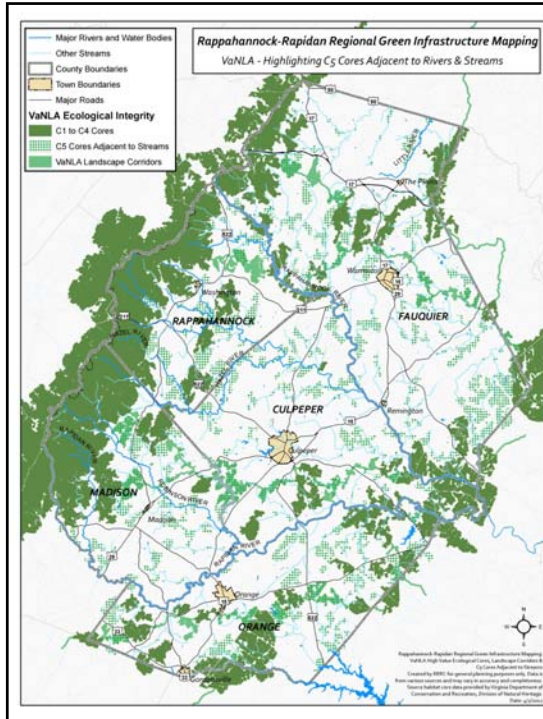
Note: Landscape Corridors were developed by the Department of Conservation & Recreation, Division of Natural Heritage to connect all ecological cores in the two highest categories (C1 and C2) in order to create a statewide network of natural lands.



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**7. Region: High Value Cores and Landscape Corridors & Major Water Cores**

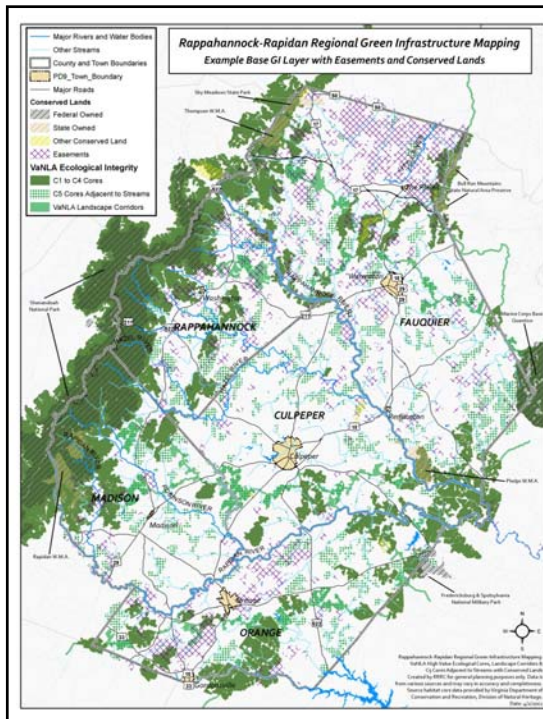
Major Water cores are VaNLA C5 Ecological Cores that are adjacent to major rivers in the Rappahannock-Rapidan region



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**8. Region: High Value Cores and Landscape Corridors & All Water cores**

All Water cores are defined as VaNLA C5 Ecological Cores that are adjacent to any river, stream or water body in the Rappahannock-Rapidan region

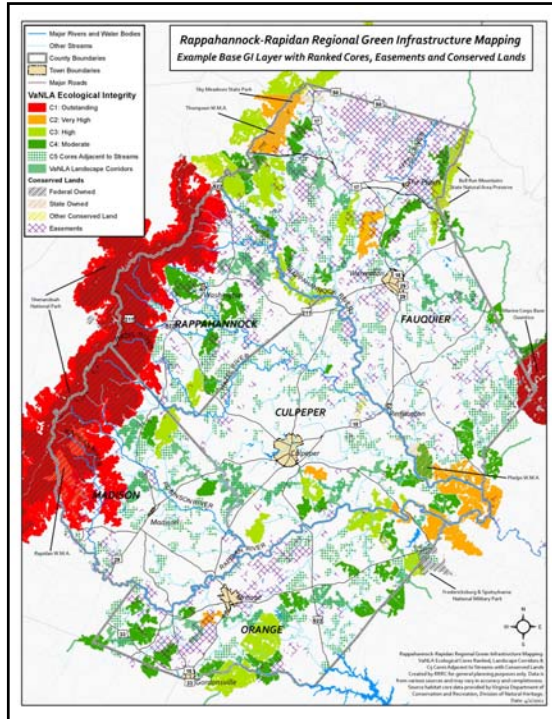


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**9. Example GI Base Map and Conserved Lands**

Example GI Base Map includes High Value VaNLA Ecological Cores (C1 to C4), VaNLA Landscape Corridors and VaNLA C5 Ecological Cores adjacent to rivers, streams and water bodies

Conserved Lands and Easement data from Virginia DCR



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#### 11. Base GI layer ranked according to EI Class

Example GI Base Map includes High Value VaNLA Ecological Cores (C1 to C4), VaNLA Landscape Corridors and VaNLA C5 Ecological Cores adjacent to rivers, streams and water bodies

Conserved Lands and Easement data from Virginia DCR

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#### Project Information:

<http://www.rrregion.org/greeninfrastructure>

Rappahannock-Rapidan Regional Commission  
 420 Southridge Parkway, Suite 106  
 Culpeper, VA 22701  
 (540) 829-7450

Patrick Mauney  
 plmauney@rrregion.org

Michelle Edwards  
 medwards@rrregion.org

