



NORTHERN  
VIRGINIA  
CONSERVATION  
TRUST

# Conservation Assessment for Northern Virginia Watersheds: Developing NVCT's Strategic Conservation Plan

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POTOMAC RIVER BASIN DWSPP ANNUAL MEETING

NOVEMBER 1, 2023

# Overview



About NVCT



Conservation Easements



Occoquan Pilot



Strategic Conservation Plan



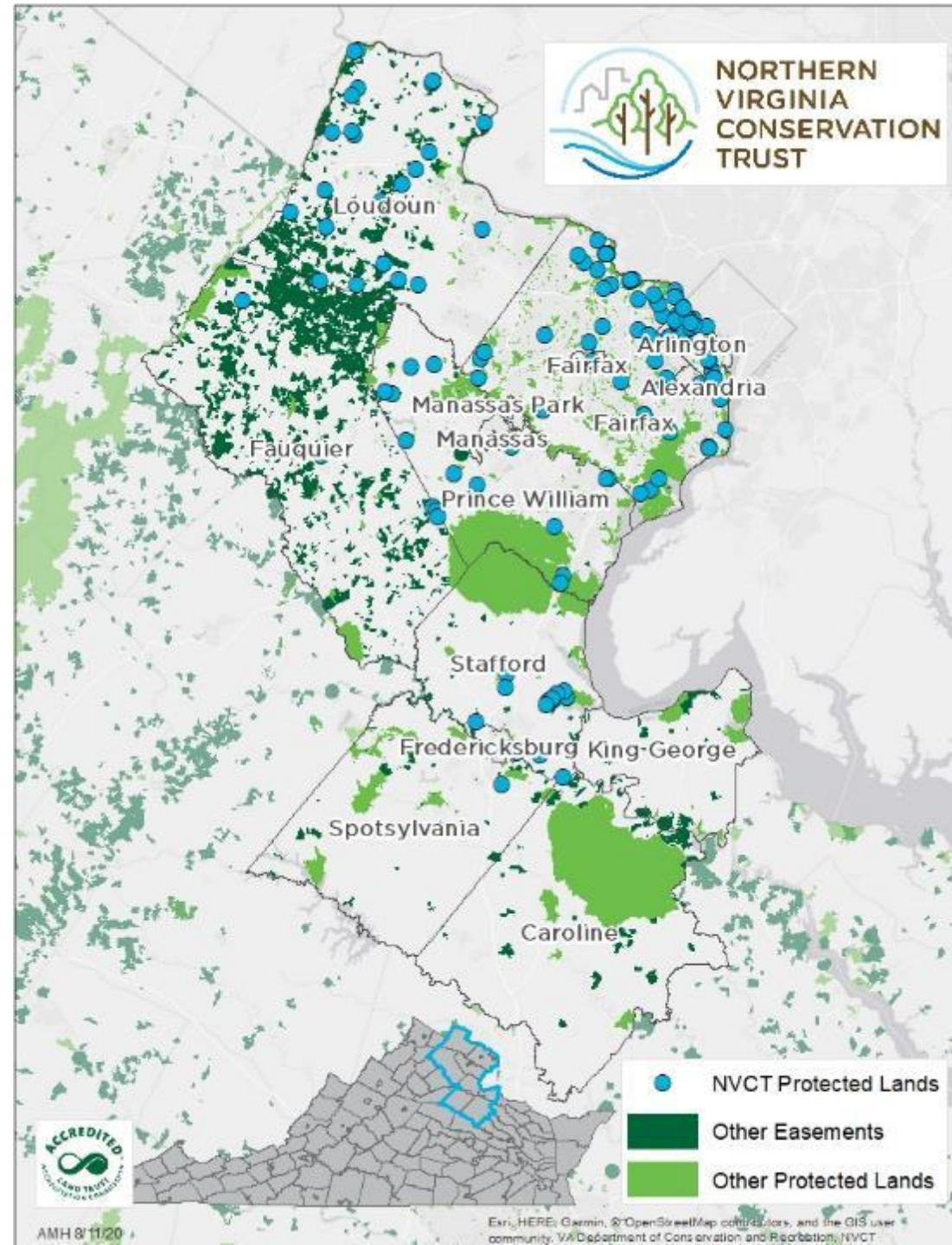
# Intro to Northern Virginia Conservation Trust

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# NVCT Service Area



# Conservation Easements

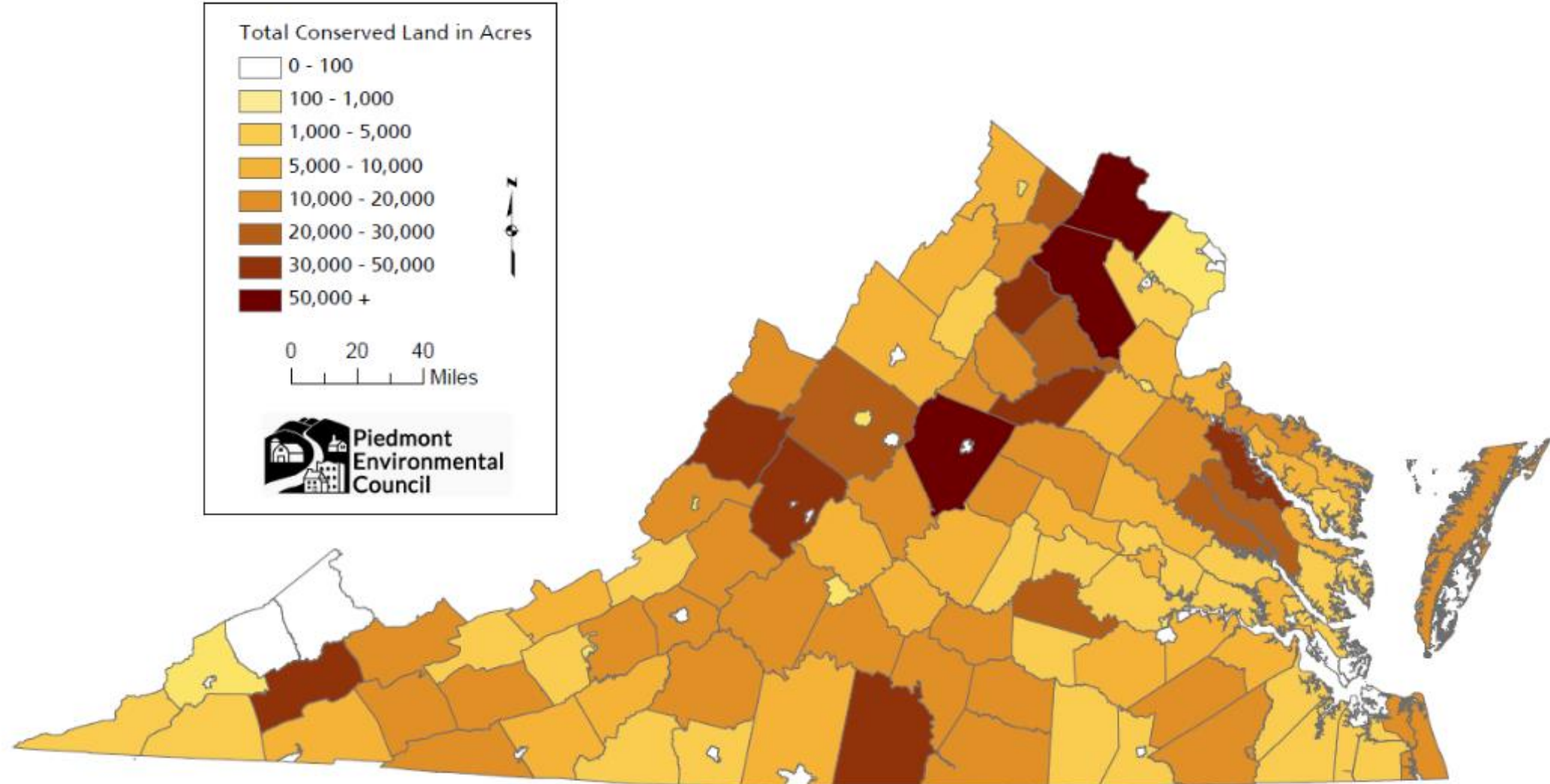
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- Legally binding tool
- Landowner-initiated choice
- Land remains in private ownership
- Permanent
- Tax benefits





# Land Protected by Conservation Easements as of 2022



# Typical Restrictions



Limits on  
subdivision



Limits on  
development



No mineral  
extraction



Riparian buffers



Scenic setbacks



No-build areas



# Typical Conservation Values

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- Open space
- Wildlife habitat
- Watershed protection
- Scenic views
- Working farms
- Historic preservation
- Threatened or endangered species
- Nature-based recreation or education
- Biological diversity





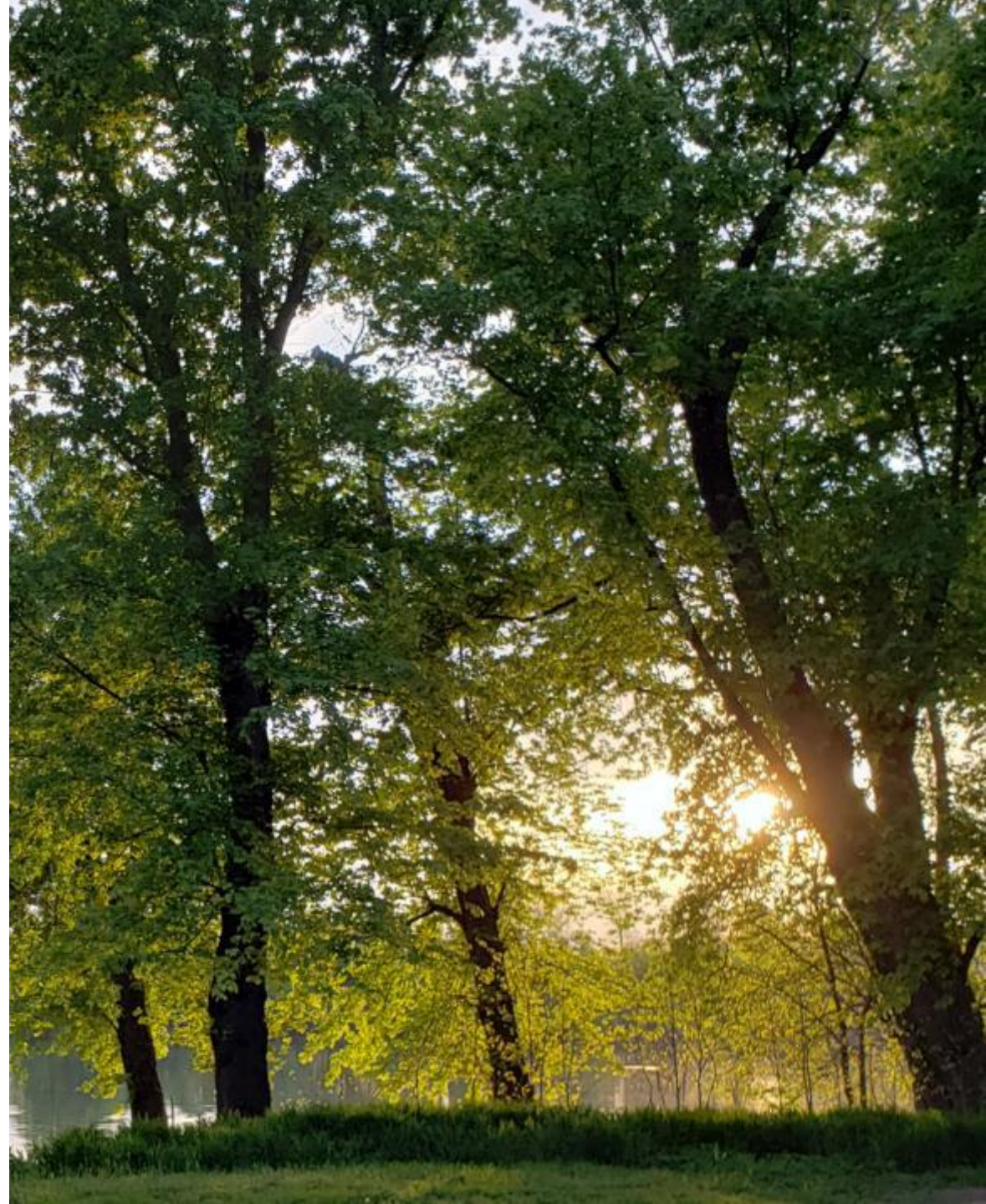
# Selection Criteria



# Data Tools Reminder:

*You get out what you put in*

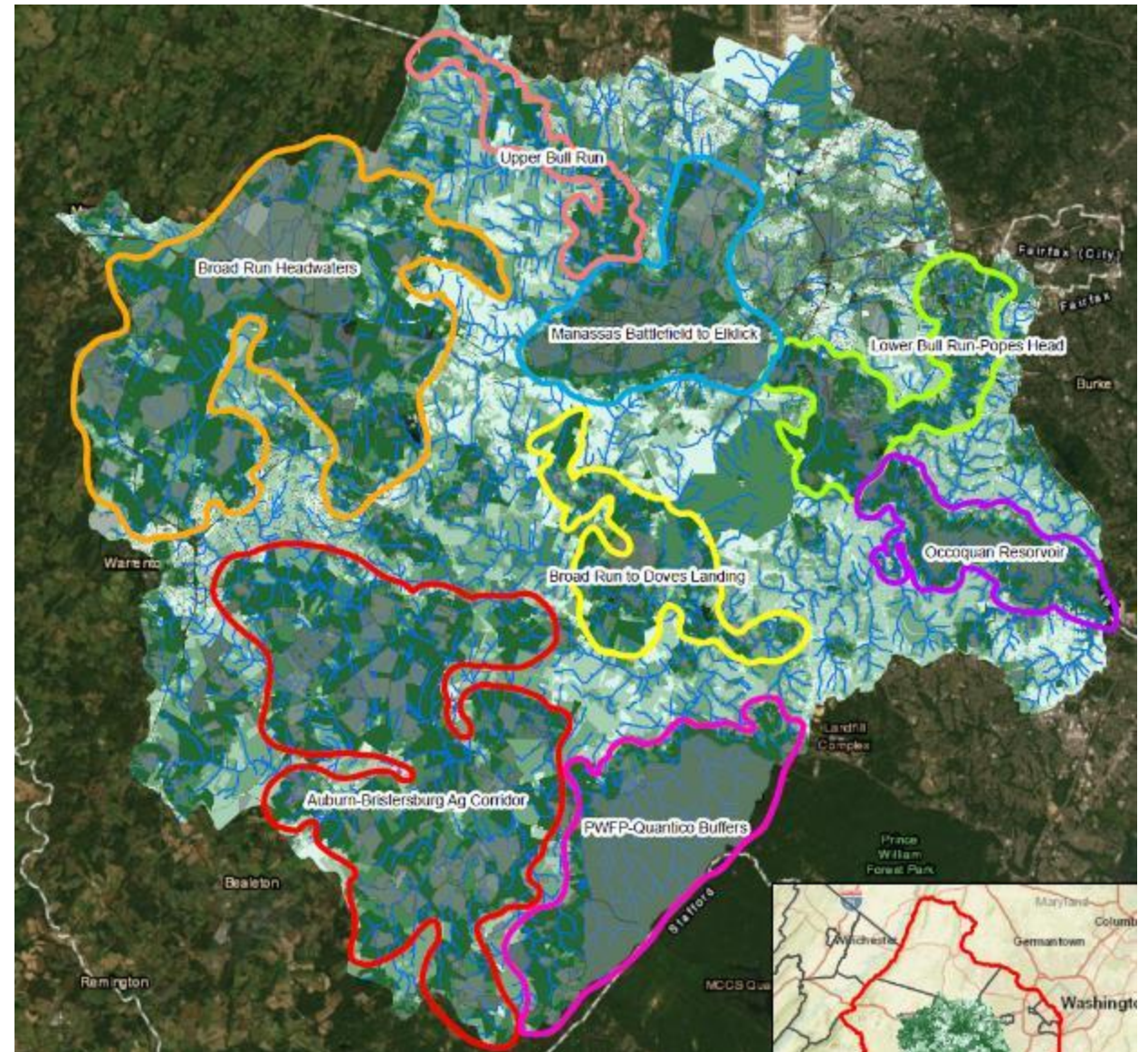
- Models prioritize based on presence/absence of GIS criteria
- Compare parcels to one another in relative terms
- How tightly criteria defined determines how many places and how much total area is prioritized.





# Occoquan Pilot

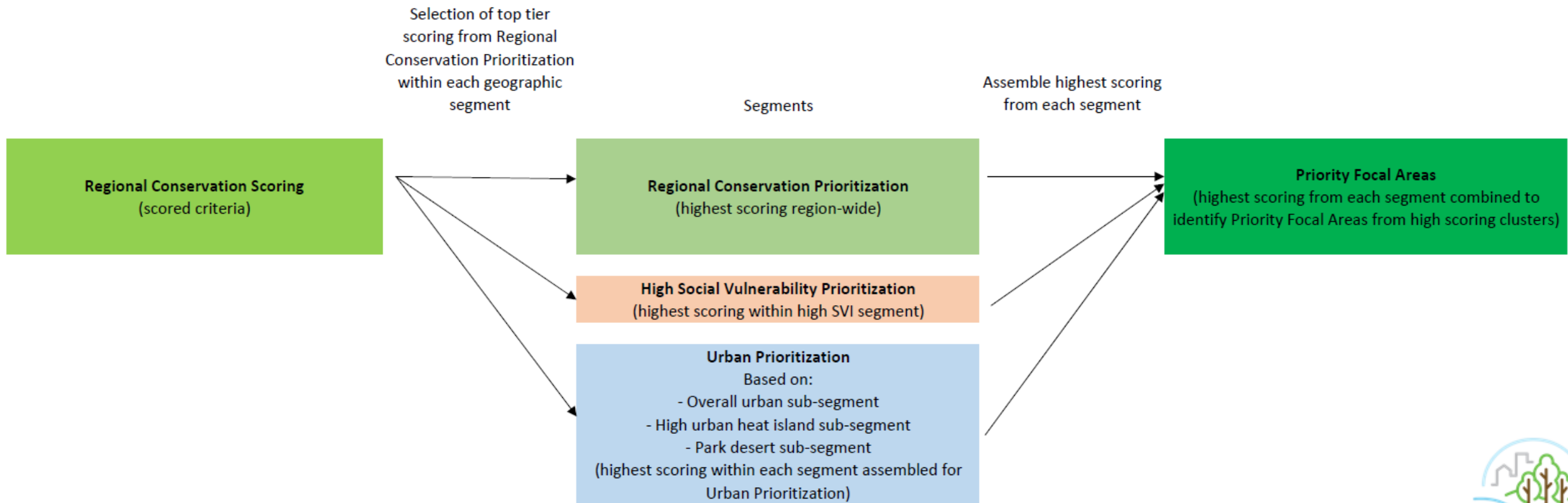
- Weighted towards water-quality related criteria
- Defined areas based on what high value areas seemed to logically connect
- Didn't try to capture all the highest priority land, but grabbed largest swathes
- Didn't prioritize among them, but seek greatest opportunities within





# Regional Strategic Conservation Plan

## PRIORITIZATION ORGANIZATION



# Framework

- 10 major categories
- 24 criteria layers
- Each ties to adopted project selection criteria
- Climate incorporated in numerous metrics

## REGIONAL CONSERVATION PRIORITIZATION

### CRITERIA LIST

#### Distance to Protected Lands

Distance to Protected Lands

#### Watershed Protection

Perennial Stream or River Frontage Presence

Forested Riparian Buffer Area

Riparian Buffer Area Effectiveness

Wetland Presence

Floodzone Presence

Watershed Value

#### Natural Resource Based Recreation & Education

Natural Recreation

#### Historic Preservation

Historic Landmarks

#### Agriculture & Forestry

Soil Suitability (for agriculture)

Landuse Suitability (for agriculture)

Forest Conservation Value

Carbon Storage

#### Natural Habitat & Biological Diversity

Ecosystem Uniqueness

Threatened Habitat Presence

Forest Area

Forest Patch Size

Wildlife Corridor Potential

Resilience

Forest Age

#### Scenic Open Space

Scenic Space

#### Feasibility Considerations: Liability

Hazards

#### Threat & Opportunity

Vulnerability

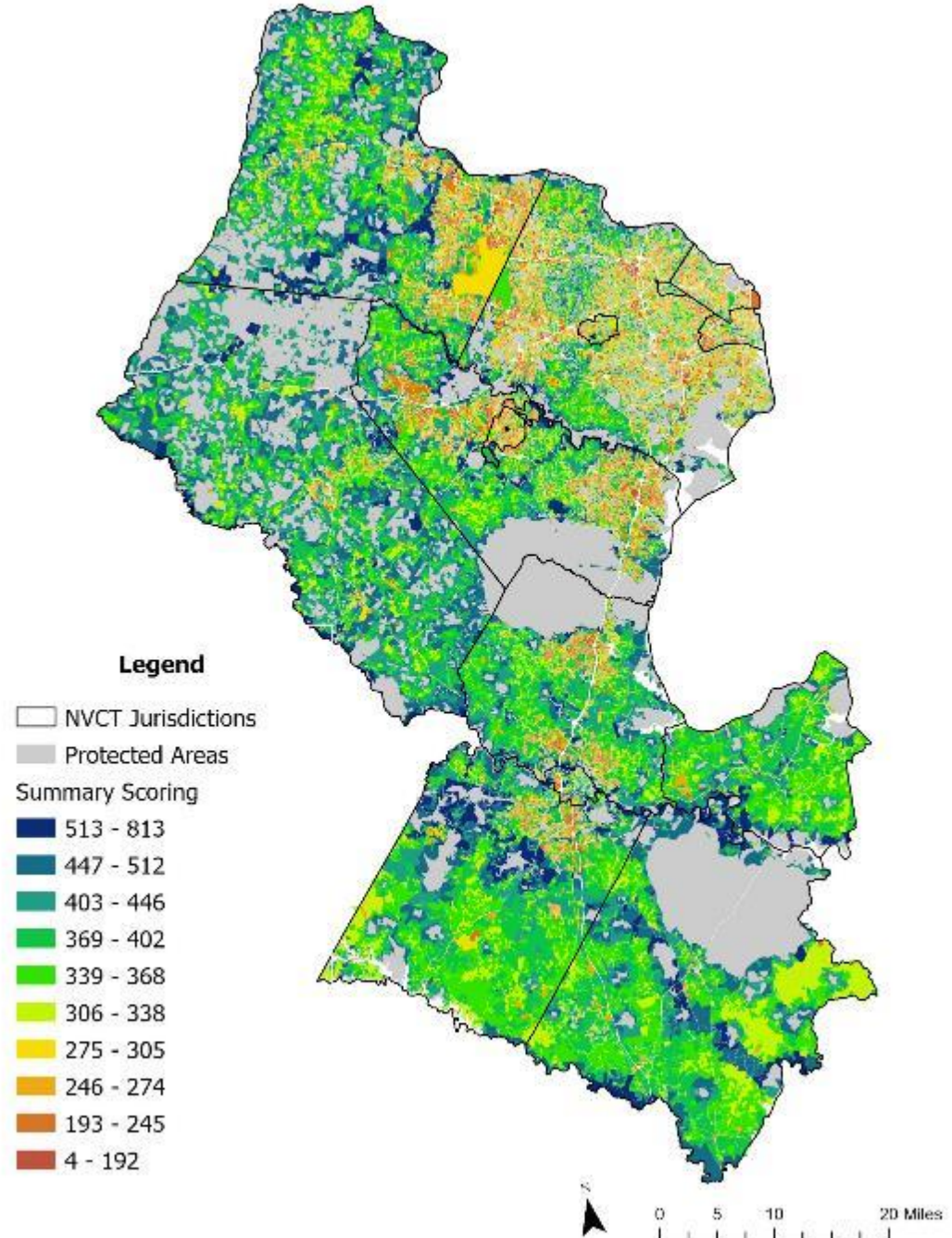
#### Conservation Tools

GAP Status



# Base Prioritization

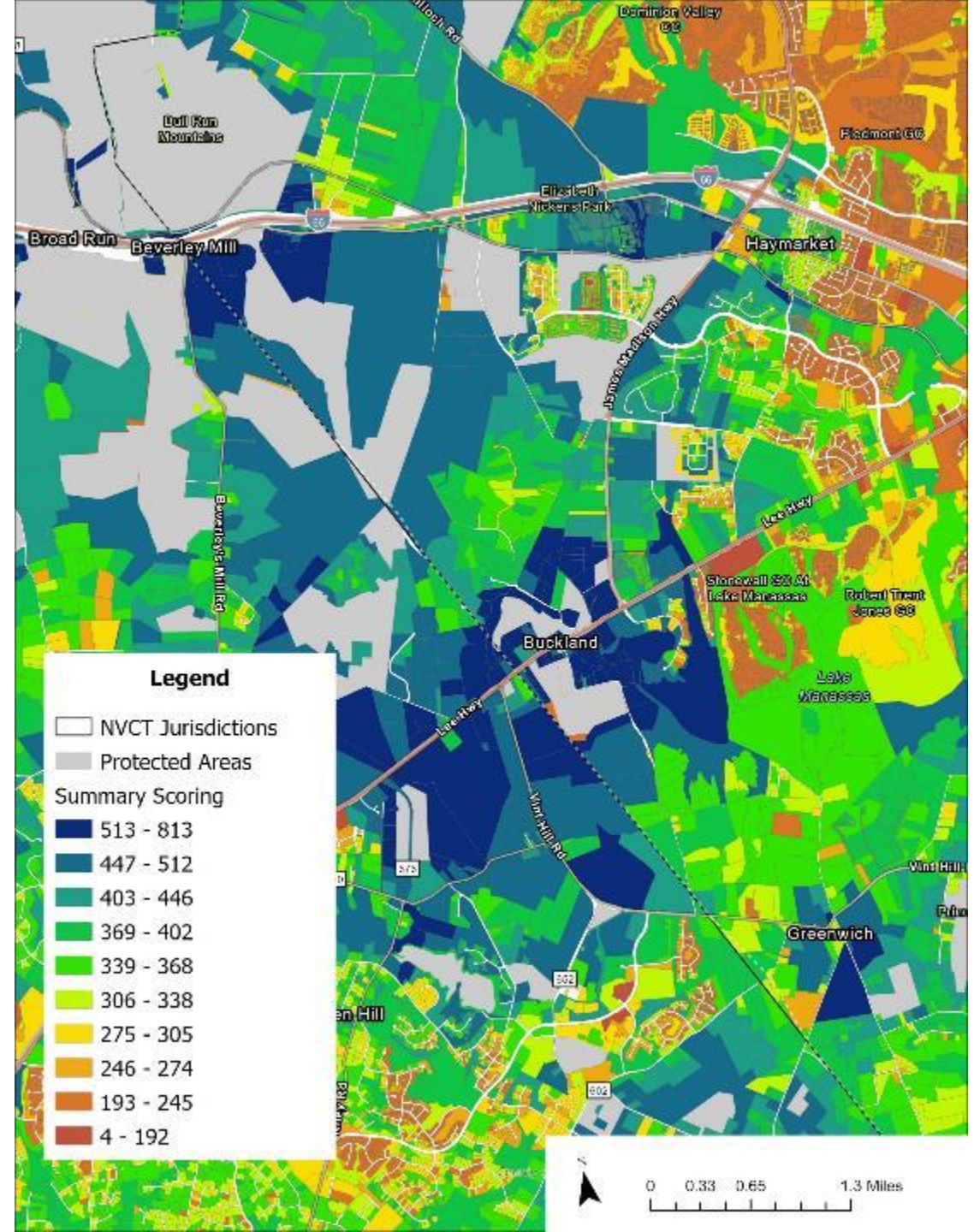
- “Layer-cake” of our 10 criteria categories (“Themes”)
- Added up by parcel
- 1,000 would be theoretical maximum
- 21% of region already conserved
- Blue – highest; Red - lowest





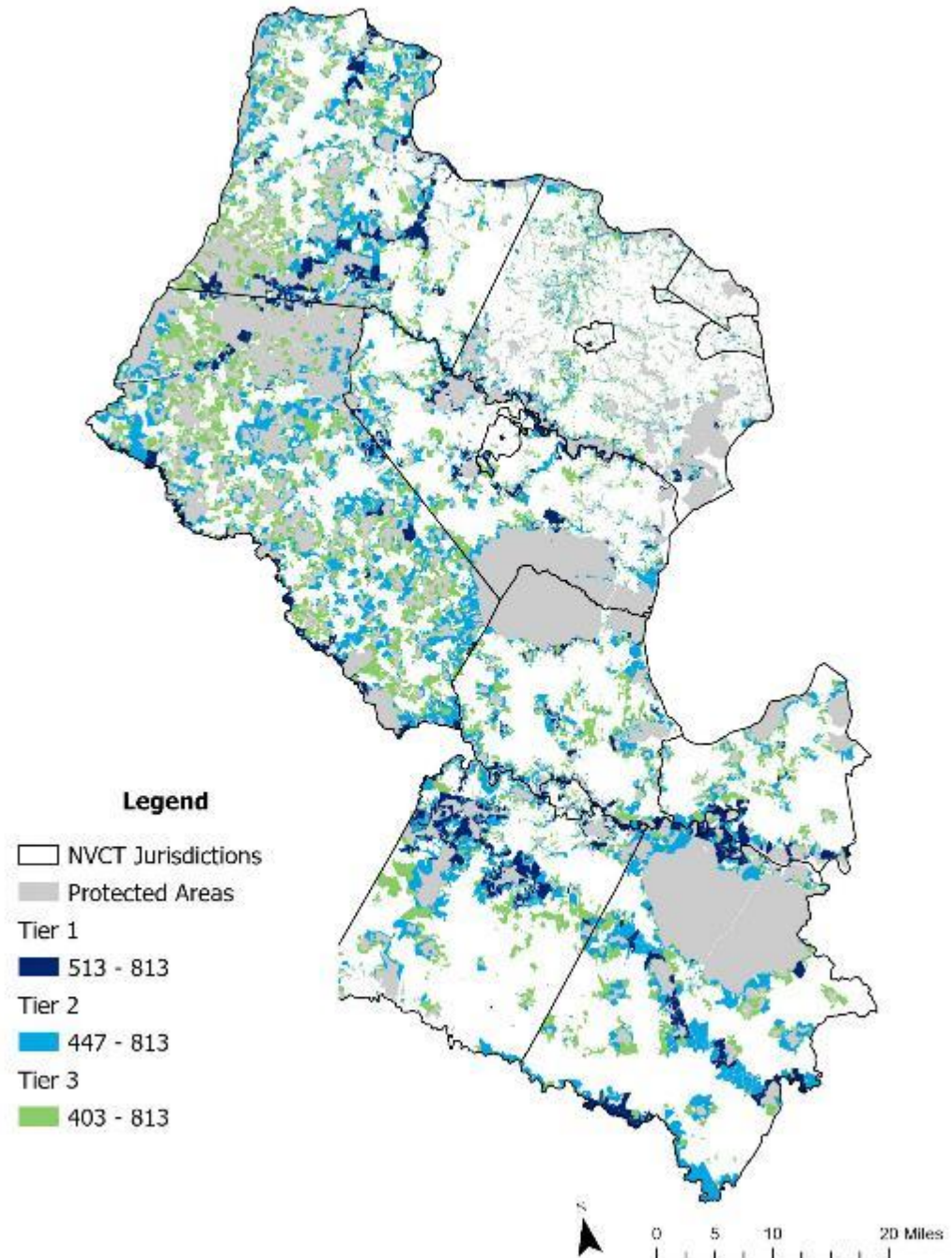
# Base Prioritization

- Shows connectivity to exiting protection
- Good diversity of urban areas as well as rural
- Size of parcels does matter, but also where they are and what's on them
- Updated for recent development (since 2014)



# Top 3 Tiers

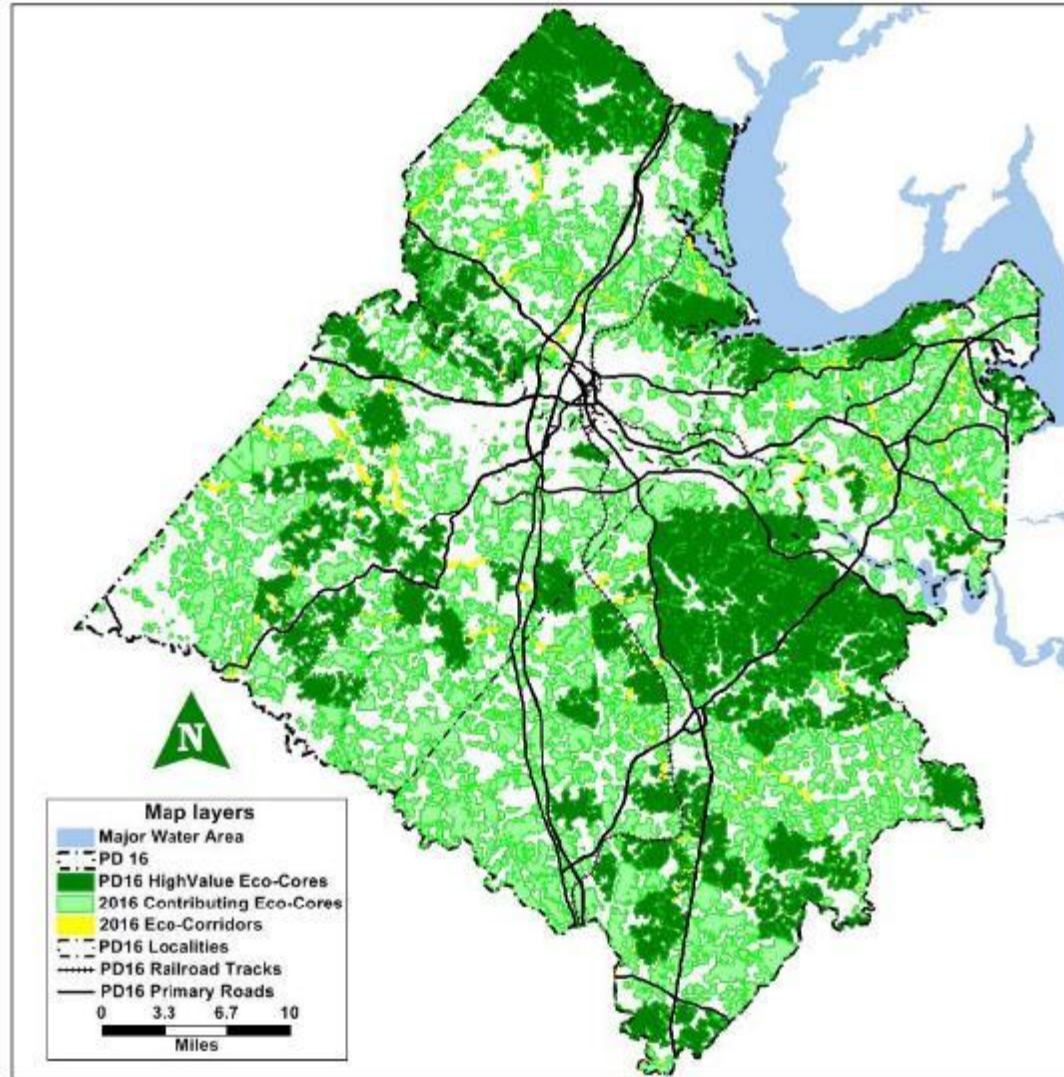
- 3 out of 10 “natural breaks”
- Selects ~27% of the service area
- Can serve as base for defining the focal areas:
  - Some area contiguous, some isolated
- Overlayed other segments:
  - Urban, Social Vulnerability





# Other examples

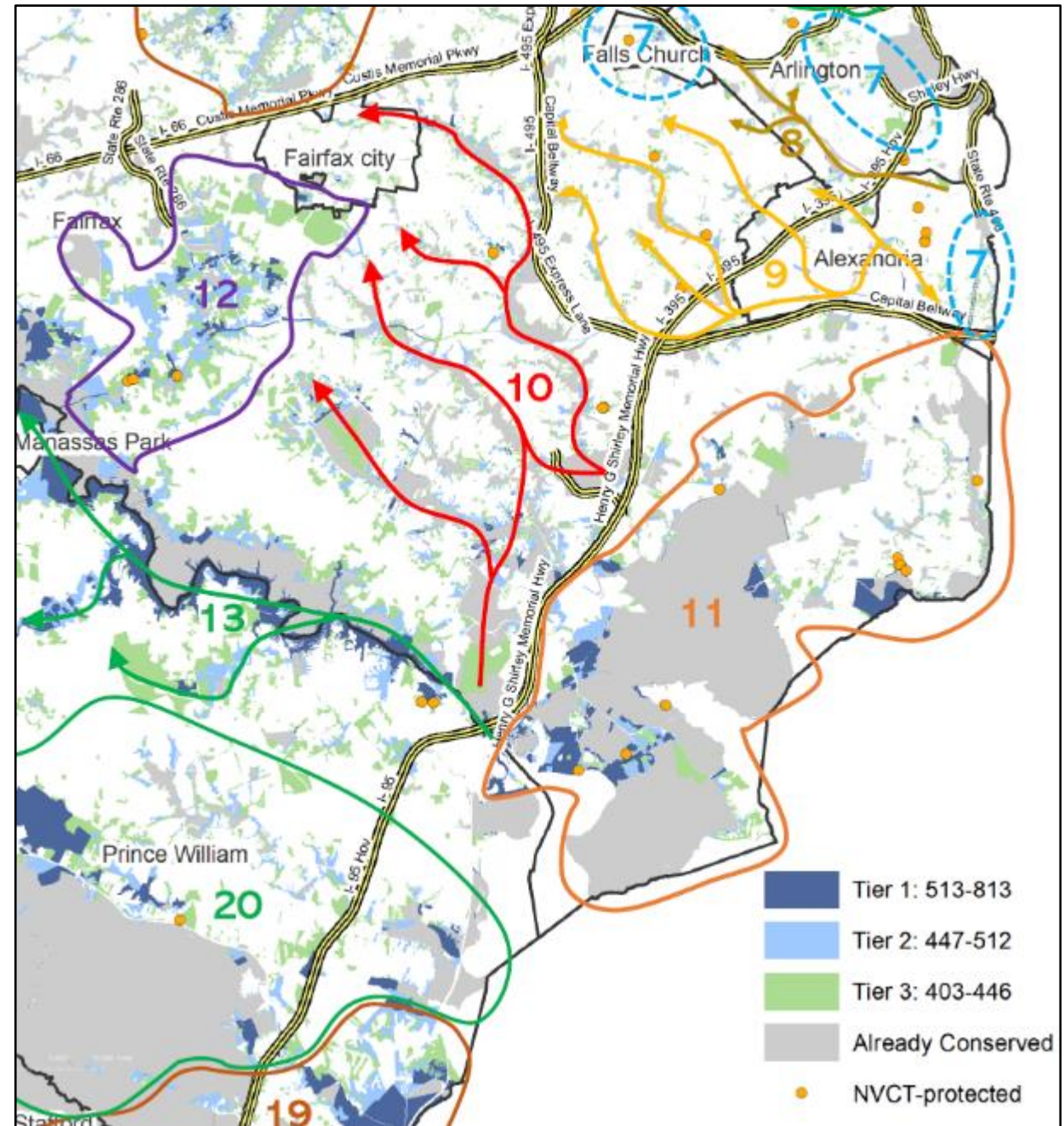
Figure 3. Updated Regional Green Infrastructure Map, 2016





# Drafting Focal Landscapes

- Currently reviewing areas and potential corridors
- 28 primary conceptual focal areas
- Many stream-corridor based, a few thematic



# Next Steps

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- Review against other plans
- Putting in internal viewer for project review
- Continued Strategic Planning
- Looking to develop landscape level campaigns around key areas and partnerships.



# Questions?



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