



Virginia DCR Natural Heritage Program

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Natural Heritage Information Manager

Virginia Department of Conservation and Recreation





Mission

To conserve Virginia's biodiversity through biological inventory, data management and analysis, protection, and stewardship.

Maintain a statewide database for:

- conservation planning
- environmental review
- land protection
- ecological management
- education and research



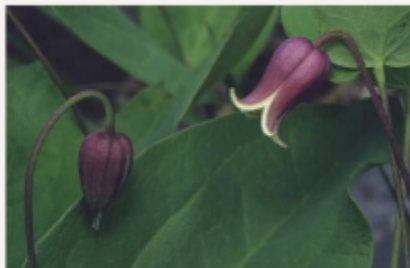
Welcome to the Virginia Department of Conservation and Recreation's *Natural Heritage Data Explorer*

This site provides interactive access to various map data representing Natural Heritage resources and other conservation values in Virginia.

ConserveVirginia, Virginia's statewide land conservation plan, is now available here.

The **Virginia Natural Heritage Data Explorer** was updated on **May 20, 2019**. To ensure the updates work correctly, we recommend refreshing your browser's cache. Instructions can be found here: <https://www.refreshyourcache.com/en/home/>

This site should be viewed in Firefox version 3.6 or higher, Google Chrome, or Safari version 3 or higher, or Internet Explorer 10 or higher.



Open Access: You do not need to register for use, nor log in, if you are interested in using the site for land use planning or conservation planning. Anyone can freely view and create maps of conservation status and conservation values, by clicking the **"Map"** tab above. Click the **"Species/Communities Search"** tab to search our database and create summaries of Natural Heritage Resources (i.e. rare species populations and natural communities) by conservation status ranks, counties, watersheds, and other descriptors.

Subscription Access: A subscription is required to access additional sensitive Natural Heritage Resources data, and/or to use the site for project review. If you represent a company, conservation organization or government agency looking for this service, please send an email with contact information and how your organization or company will utilize the website to nhderegister@dcr.virginia.gov. We will respond to your request within 5 business days.

User login

E-mail or username *

Password *

- [Create new account](#)
- [Request new password](#)

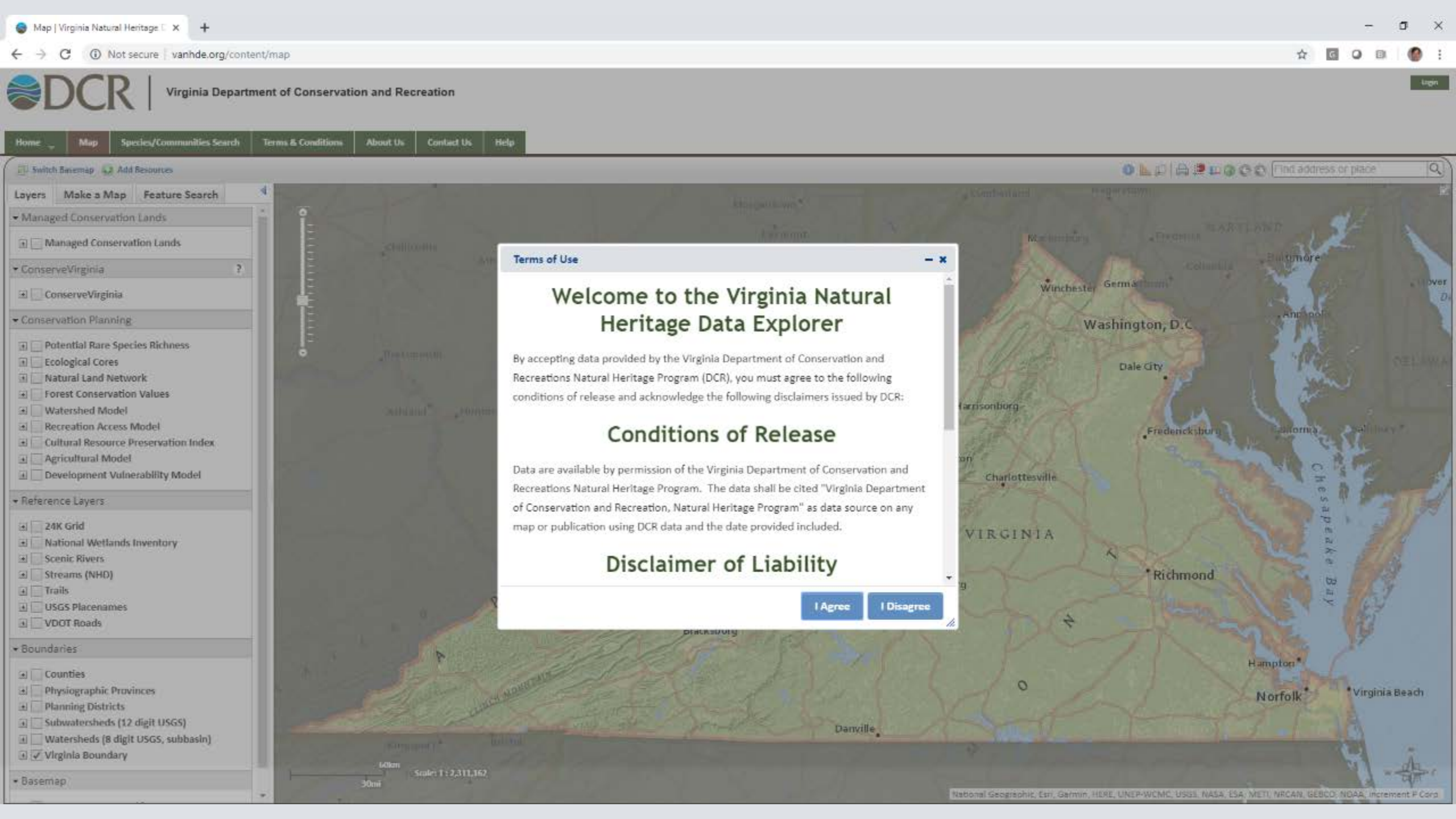
Log in

History of the Natural Heritage Data Explorer

- **Mid-2000's, contracted local consultant to develop two tools in ArcIMS**
 - Natural Heritage Data Explorer (NHDE) – for environmental review
 - Land Conservation Data Explorer (LCDE) – for the conservation community
- **By early 2010's, updates started to become too expensive**
- **As member program, approached NatureServe to develop and host site**
 - In 2013, Virginia's tool was the first Environmental Review Tool (ERT) developed by NatureServe
 - Consolidated former NHDE and LCDE in one site
 - All other ERTs developed by NatureServe originated from the site developed for Virginia
 - Many benefits for the network of natural heritage programs
 - Makes ERTs more affordable by reducing development costs
 - Allows all programs to benefit from improvements developed for other programs
 - Generates revenue for NatureServe

Benefits of Natural Heritage Data Explorer

- It is the central portal for accessing natural heritage products
- It is live 24/7 for over 200 subscribers and likely thousands of public users
 - Subscribers include localities, state and federal agencies, consultants, and land trusts
- **Project Review**
 - Since 2013, projects submitted to site increased by 32%
 - Over 2,500 development and conservation projects submitted annually for review
 - Vital to timely provision of resource data to inform planning and development decisions
- **Conservation Planning**
 - Governor Northam's ConserveVirginia
 - ConservationVision – Virginia's conservation planning atlas
 - Mapped locations of rare plant and animal species, natural communities, and unique habitats
 - Habitat Suitability Models for over 160 of the rarest species in Virginia
 - Including all species listed as threatened or endangered by Virginia or the federal government
 - In the process of adding all globally rare species without government protections



Terms of Use

Welcome to the Virginia Natural Heritage Data Explorer

By accepting data provided by the Virginia Department of Conservation and Receptions Natural Heritage Program (DCR), you must agree to the following conditions of release and acknowledge the following disclaimers issued by DCR:

Conditions of Release

Data are available by permission of the Virginia Department of Conservation and Receptions Natural Heritage Program. The data shall be cited "Virginia Department of Conservation and Recreation, Natural Heritage Program" as data source on any map or publication using DCR data and the date provided included.

Disclaimer of Liability

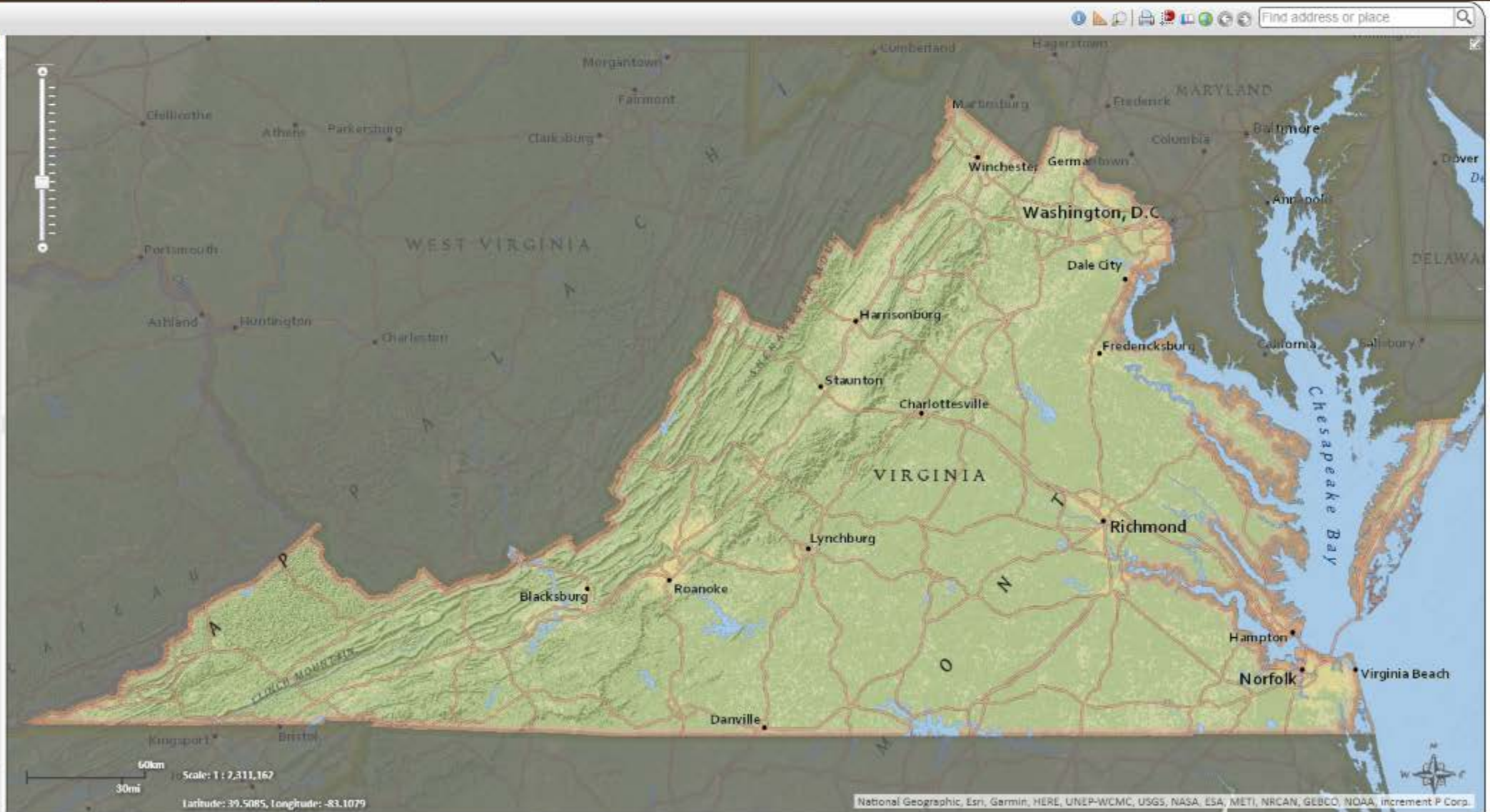
[I Agree](#) [I Disagree](#)

- Switch Basemap Add Resources
- Layers Make a Map Feature Search
- Managed Conservation Lands
 - Managed Conservation Lands
- ConserveVirginia
 - ConserveVirginia
- Conservation Planning
 - Potential Rare Species Richness
 - Ecological Cores
 - Natural Land Network
 - Forest Conservation Values
 - Watershed Model
 - Recreation Access Model
 - Cultural Resource Preservation Index
 - Agricultural Model
 - Development Vulnerability Model
- Reference Layers
 - 24K Grid
 - National Wetlands Inventory
 - Scenic Rivers
 - Streams (NHD)
 - Trails
 - USGS Placenames
 - VDOT Roads
- Boundaries
 - Counties
 - Physiographic Provinces
 - Planning Districts
 - Subwatersheds (12 digit USGS)
 - Watersheds (8 digit USGS, subbasin)
 - Virginia Boundary
- Basemap

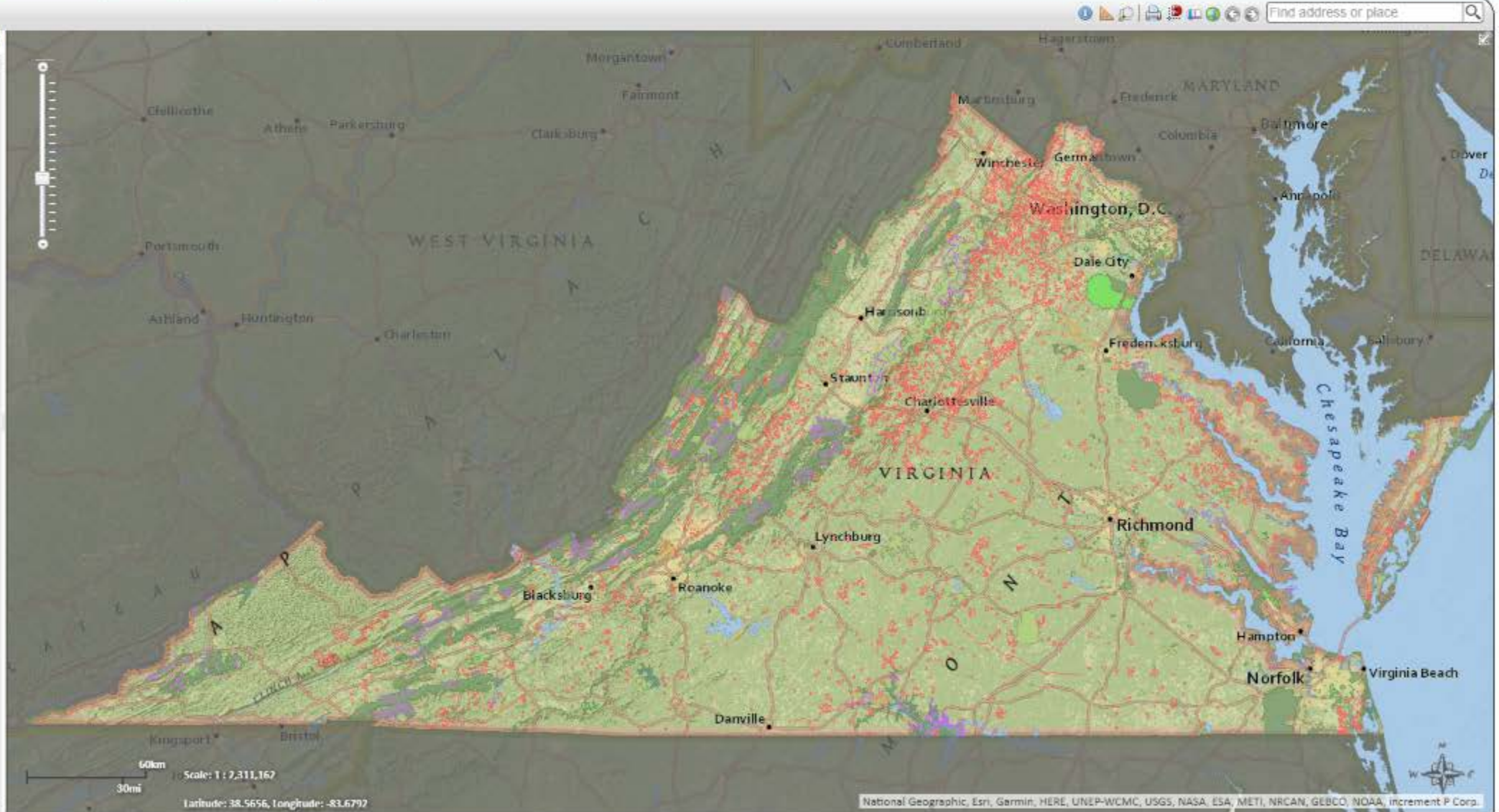
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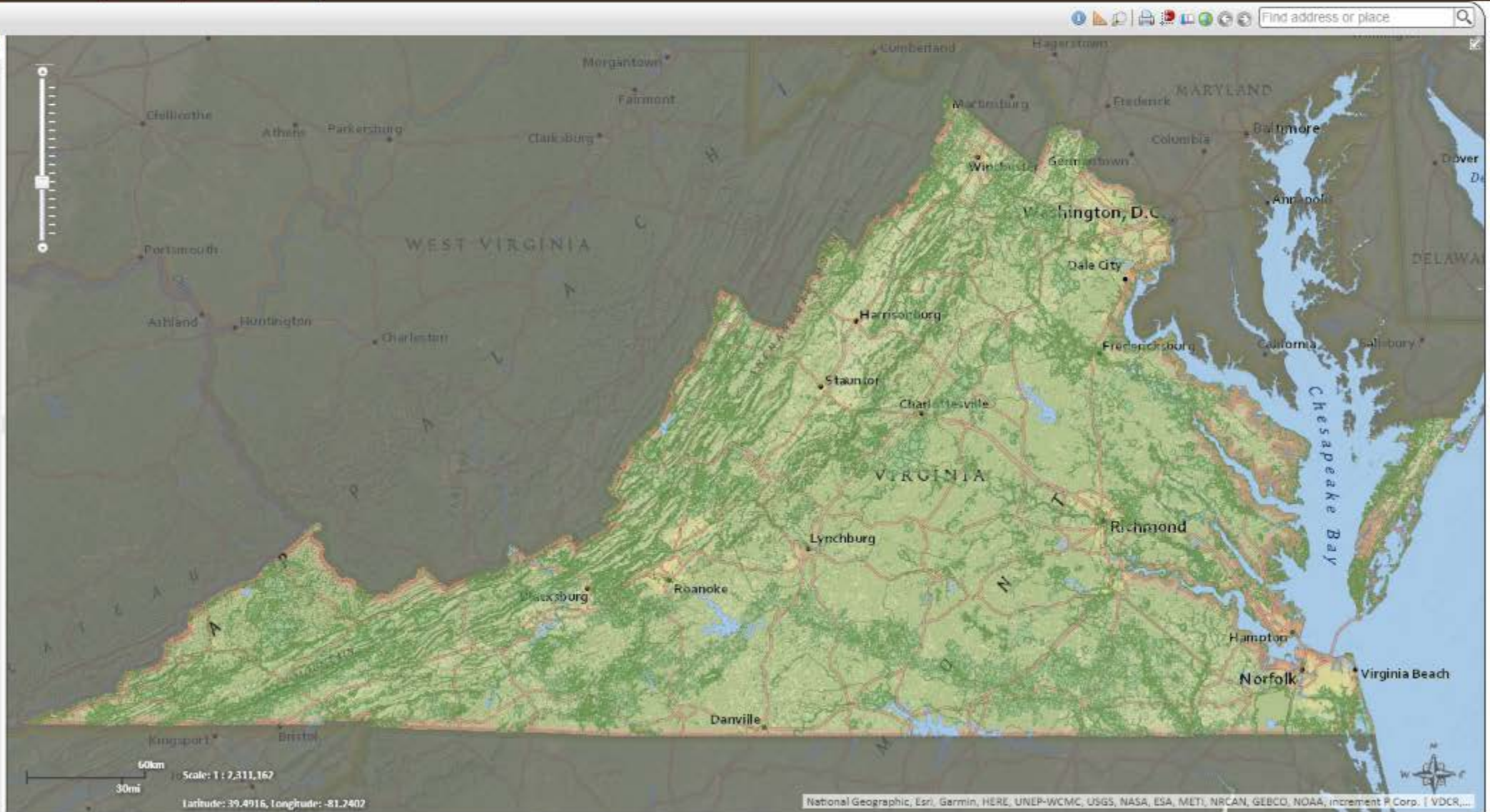
- Managed Conservation Lands**
- Managed Conservation Lands
 - Designation
 - Coheld Easement
 - Conservation Easement
 - Federal Lands
 - Local Lands
 - Non-Profit Lands
 - State Lands
- ConserveVirginia**
- ConserveVirginia
- Conservation Planning**
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- Counties



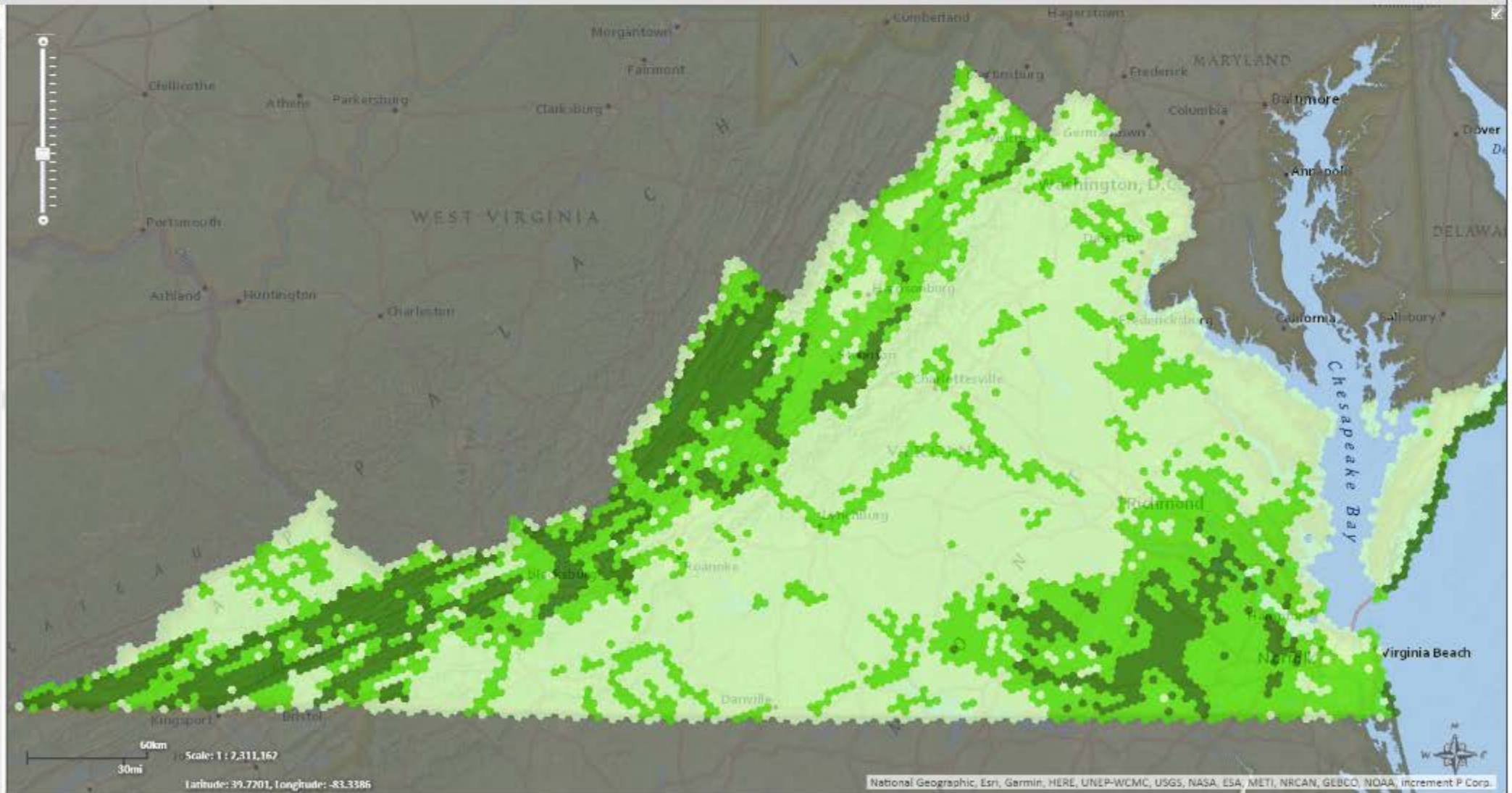
Switch Basemap | Add Resources

Layers | Make a Map | Feature Search

- Managed Conservation Lands
 - Managed Conservation Lands
- ConserveVirginia
 - ConserveVirginia
 - ConserveVirginia Map
 - Agriculture & Forestry Category
 - Natural Habitat & Ecosystem Diversity Category
 - Floodplains & Flooding Resilience Category
 - Cultural & Historic Preservation Category
 - Scenic Preservation Category
 - Protected Landscapes Resilience Category
- Conservation Planning
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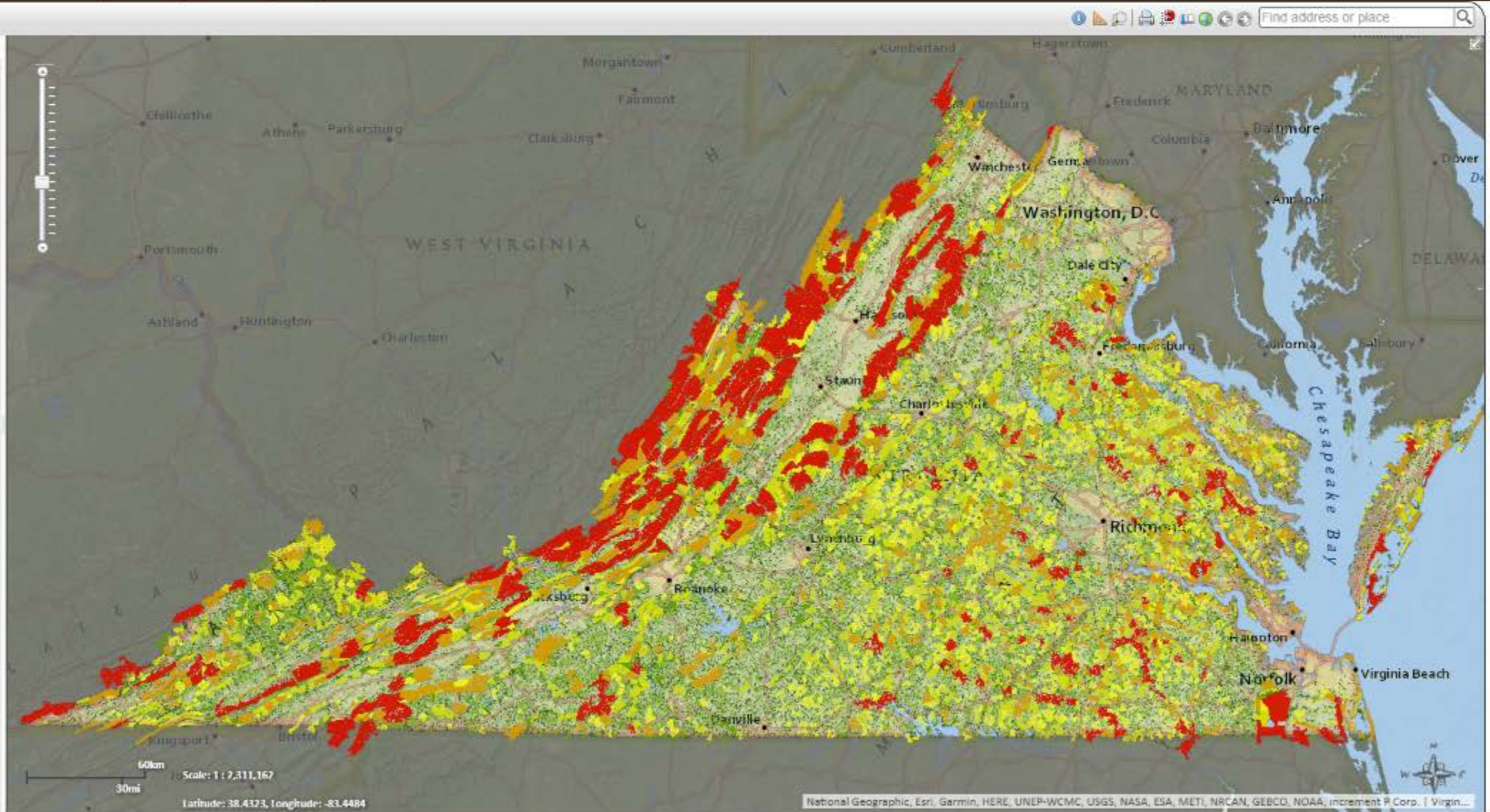
- Managed Conservation Lands
 - Managed Conservation Lands
- ConserveVirginia
 - ConserveVirginia
- Conservation Planning
 - Potential Rare Species Richness
 - Low
 - Medium
 - High
 - Ecological Cores
 - Natural Land Network
 - Forest Conservation Values
 - Watershed Model
 - Recreation Access Model
 - Cultural Resource Preservation Index
 - Agricultural Model
 - Development Vulnerability Model
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- Boundaries
 - Counties
 - Physiographic Provinces
 - Planning Districts
 - Subwatersheds (12 digit USGS)
 - Watersheds (8 digit USGS, subbasin)



Switch Basemap | Add Resources

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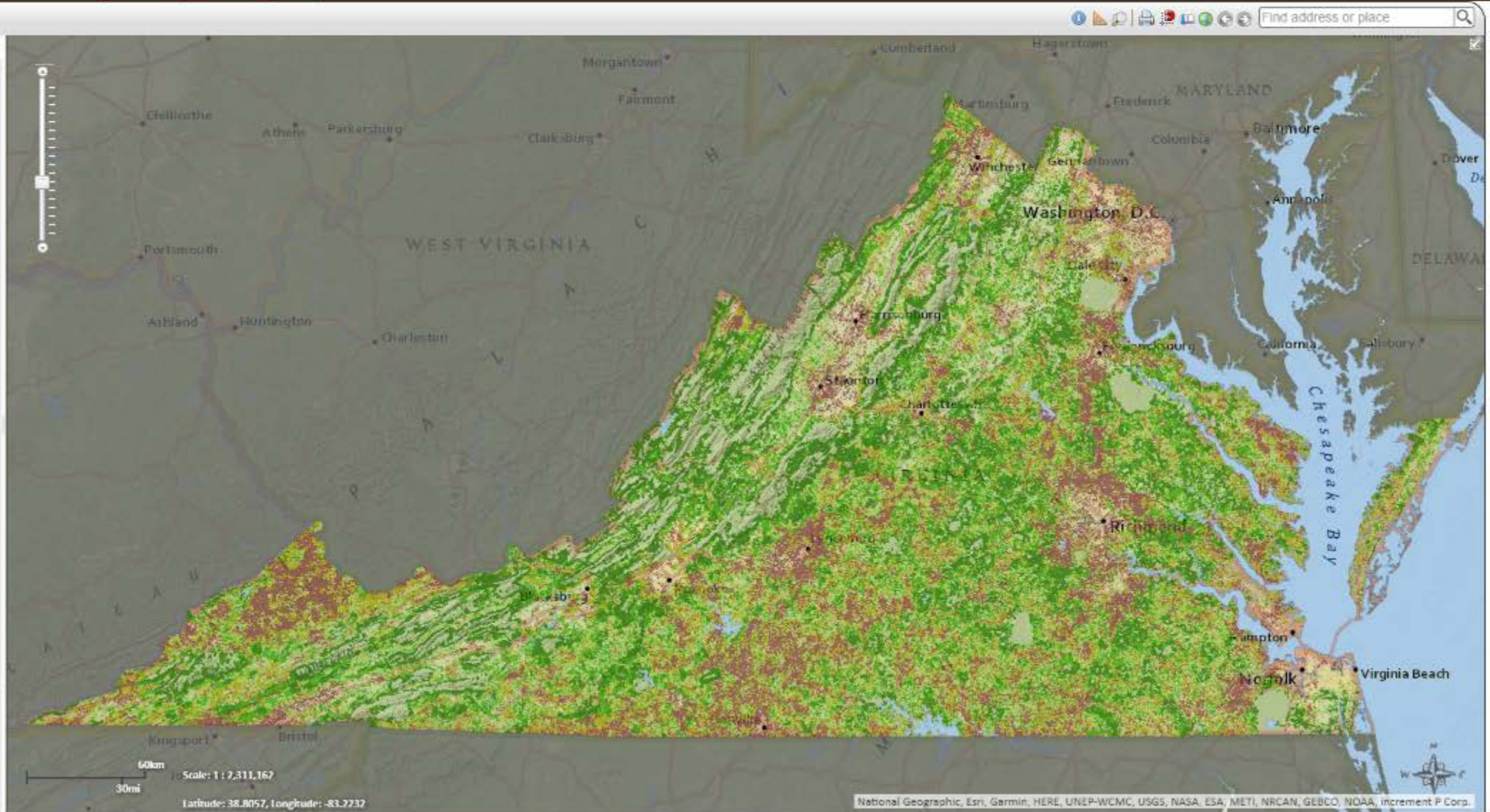
- Managed Conservation Lands
 - Managed Conservation Lands
- ConserveVirginia
 - ConserveVirginia
- Conservation Planning
 - Potential Rare Species Richness
 - Ecological Cores
 - C1: Outstanding
 - C2: Very High
 - C3: High
 - C4: Moderate
 - C5: General
 - Natural Land Network
 - Natural Land Network
 - Forest Conservation Values
 - Watershed Model
 - Recreation Access Model
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 - Ecological Cores
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 - 5: Outstanding
 - 4: Very High
 - 3: High
 - 2: Moderate
 - 1: Average
 - Watershed Model
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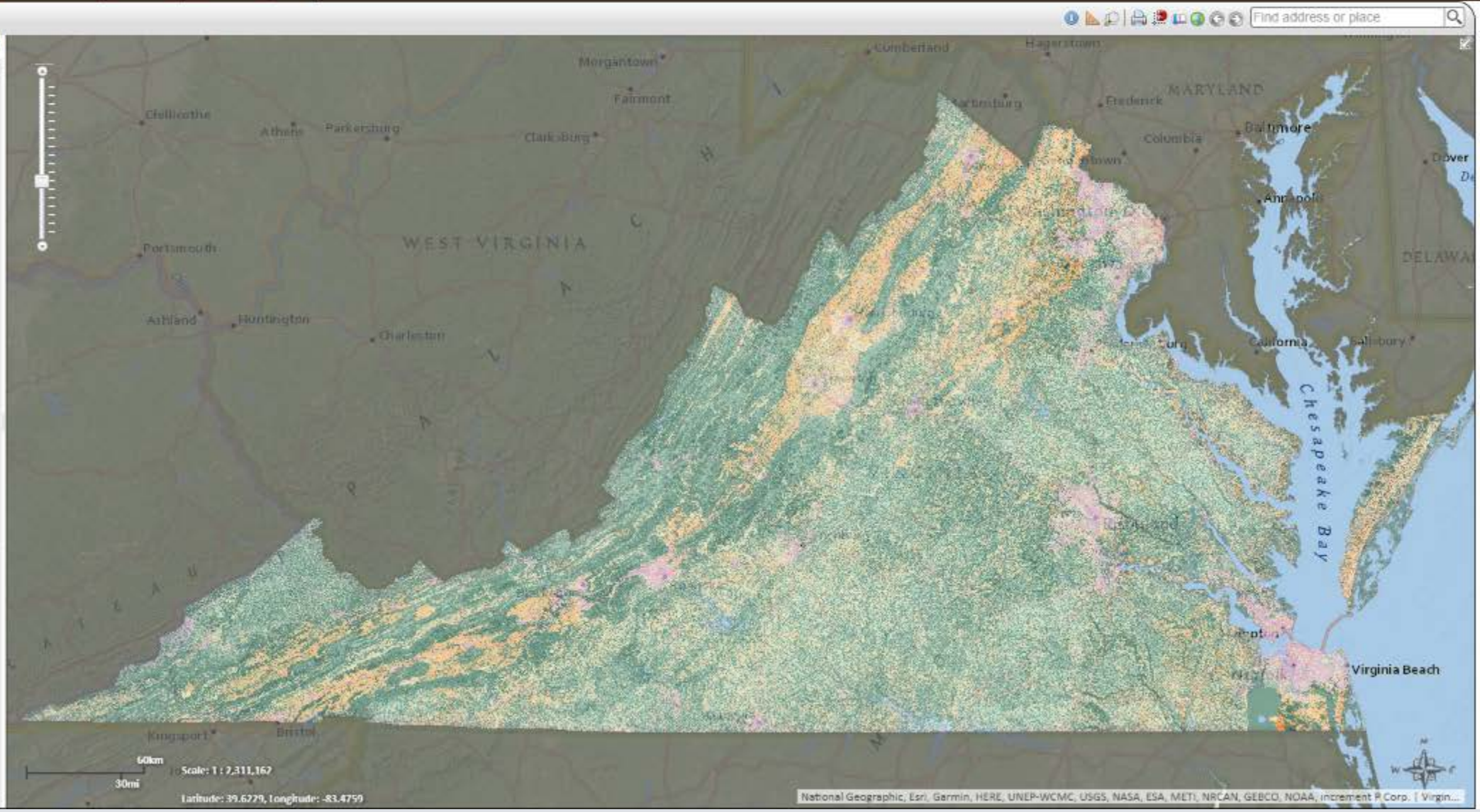


Switch Basemap | Add Resources

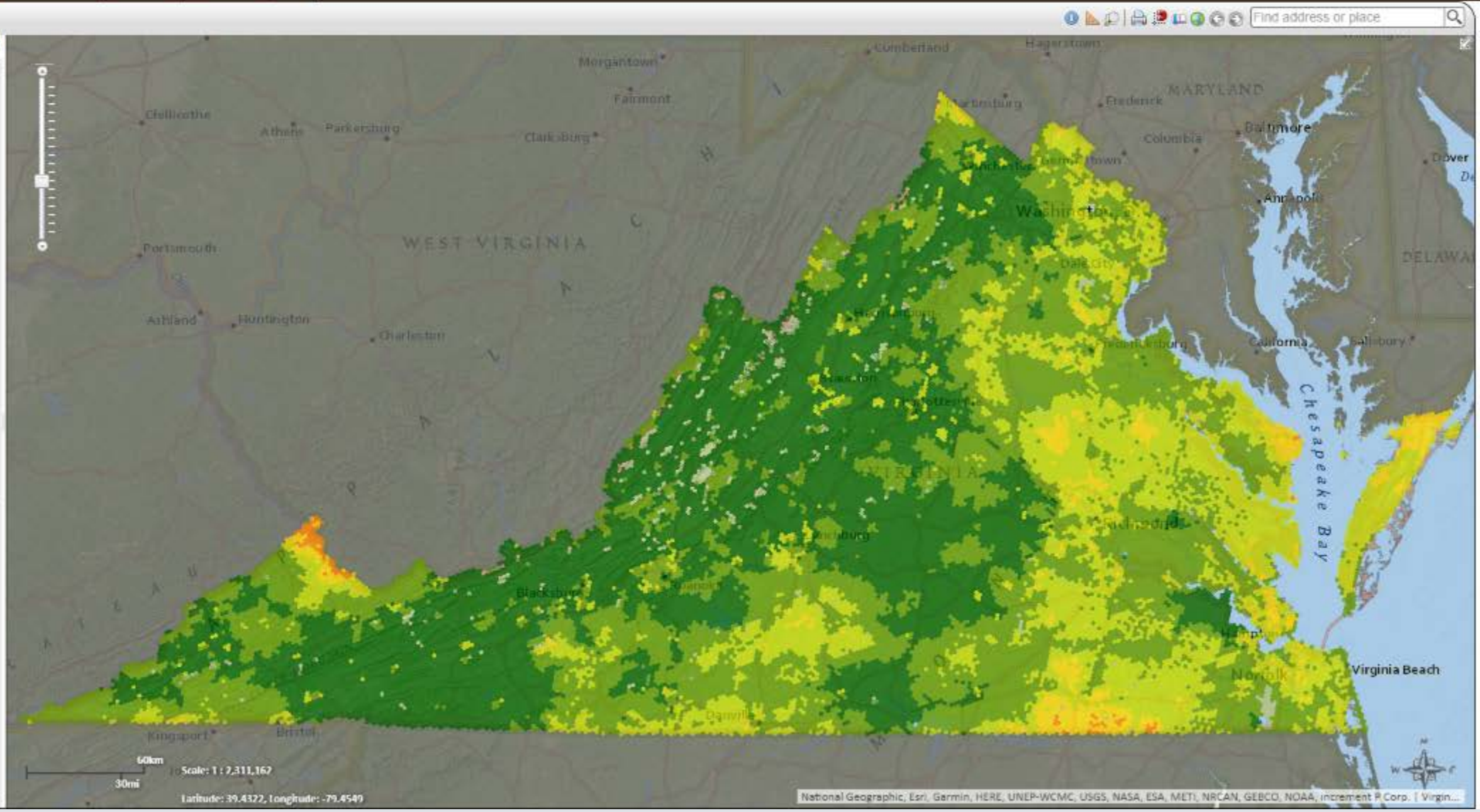
Layers | Make a Map | Feature Search

- Managed Conservation Lands
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- ConserveVirginia
 - ConserveVirginia
- Conservation Planning
 - Potential Rare Species Richness
 - Ecological Cores
 - Natural Land Network
 - Forest Conservation Values
 - Watershed Model
 - Conservation Priority
 - Class I (1 - 20; Lowest Priority)
 - Class II (21 - 40)
 - Class III (41 - 60)
 - Class IV (61 - 80)
 - Class V (81 - 100; Highest Priority)
 - Restoration or BMP Priority
 - Class I (1 - 20; Lowest Priority)
 - Class II (21 - 40)
 - Class III (41 - 60)
 - Class IV (61 - 80)
 - Class V (81 - 100; Highest Priority)
 - Urban Stormwater Management Priority
 - Class I (1 - 20; Lowest Priority)
 - Class II (21 - 40)
 - Class III (41 - 60)
 - Class IV (61 - 80)
 - Class V (81 - 100; Highest Priority)
 - Recreation Access Model
 - Cultural Resource Preservation Index
 - Agricultural Model
 - Development Vulnerability Model

Reference Layers



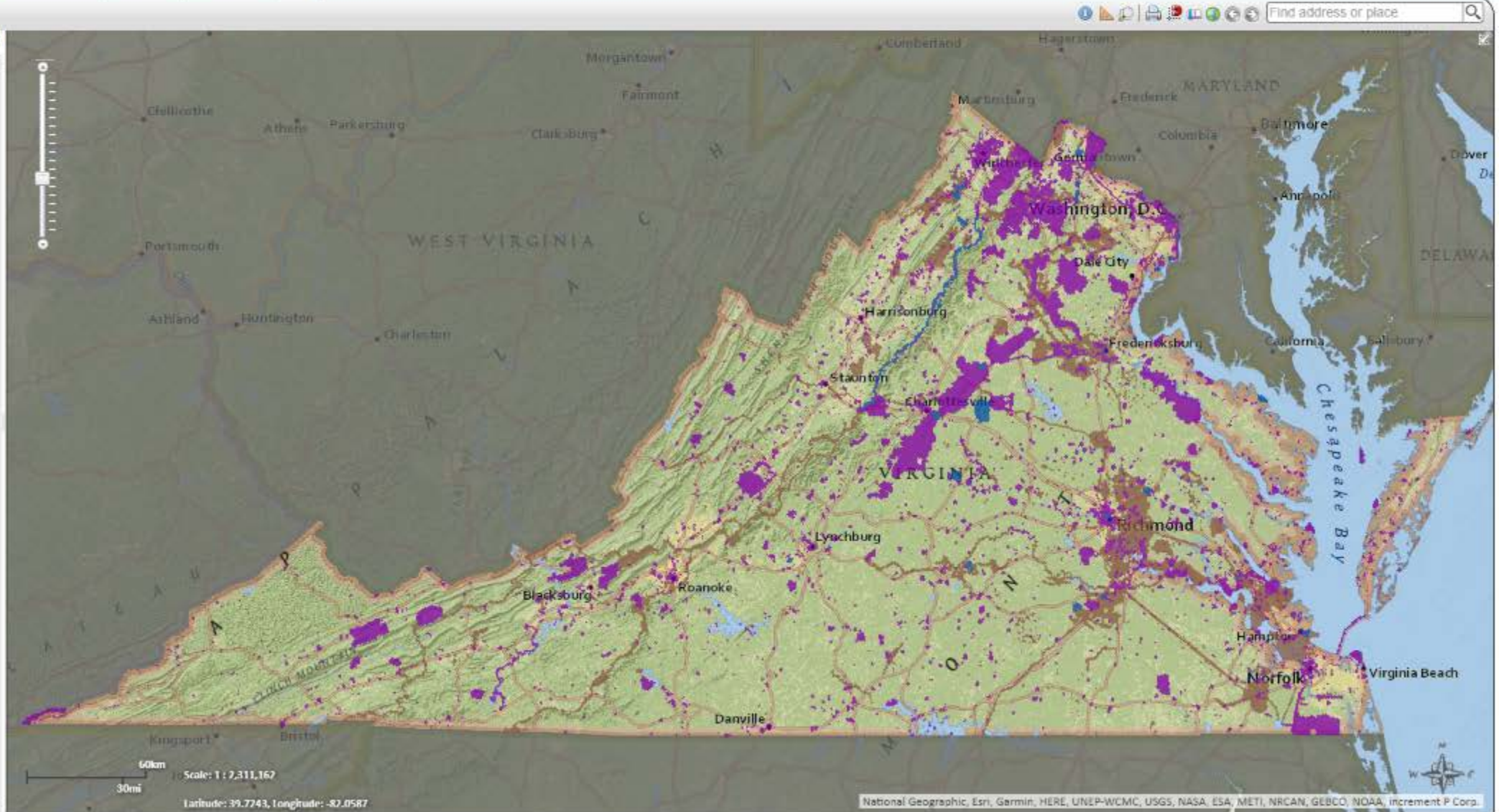
- Managed Conservation Lands
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 - ConserveVirginia
- Conservation Planning
 - Potential Rare Species Richness
 - Ecological Cores
 - Natural Land Network
 - Forest Conservation Values
 - Watershed Model
 - Recreation Access Model**
 - Aquatic Recreation Access
 - Aquatic Recreation Score
 - Benchmark Status: Boating
 - Avg. Drive Time to Boating
 - Benchmark Status: Fishing
 - Avg. Drive Time to Fishing
 - Benchmark Status: Swimming
 - Avg. Drive Time to Swimming
 - Terrestrial Recreation Access
 - Terrestrial Recreation Score
 - 0: Very High Need
 - 1: High Need
 - 2: Moderate Need
 - 3: Low Need
 - 4: Very Low Need
 - 5: All Benchmarks Met
 - Benchmark Status: Regional Parks
 - Avg. Drive Time to Park of 100+ Acres
 - Benchmark Status: Regional Trails
 - Avg. Drive Time to Trail System of 10+ Mile
 - Benchmark Status: Local Parks
 - Avg. Walk Time to Local Park
 - Benchmark Status: Local Trails



Switch Basemap Add Resources

Layers Make a Map Feature Search

- Managed Conservation Lands
 - Managed Conservation Lands
- ConserveVirginia
 - ConserveVirginia
- Conservation Planning
 - Potential Rare Species Richness
 - Ecological Cores
 - Natural Land Network
 - Forest Conservation Values
 - Watershed Model
 - Recreation Access Model
 - Cultural Resource Preservation Index
 - 3
 - 2
 - 1
 - Agricultural Model
 - Development Vulnerability Model
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Switch Basemap | Add Resources

Layers | Make a Map | Feature Search

Managed Conservation Lands

- Managed Conservation Lands

ConserveVirginia

- ConserveVirginia

Conservation Planning

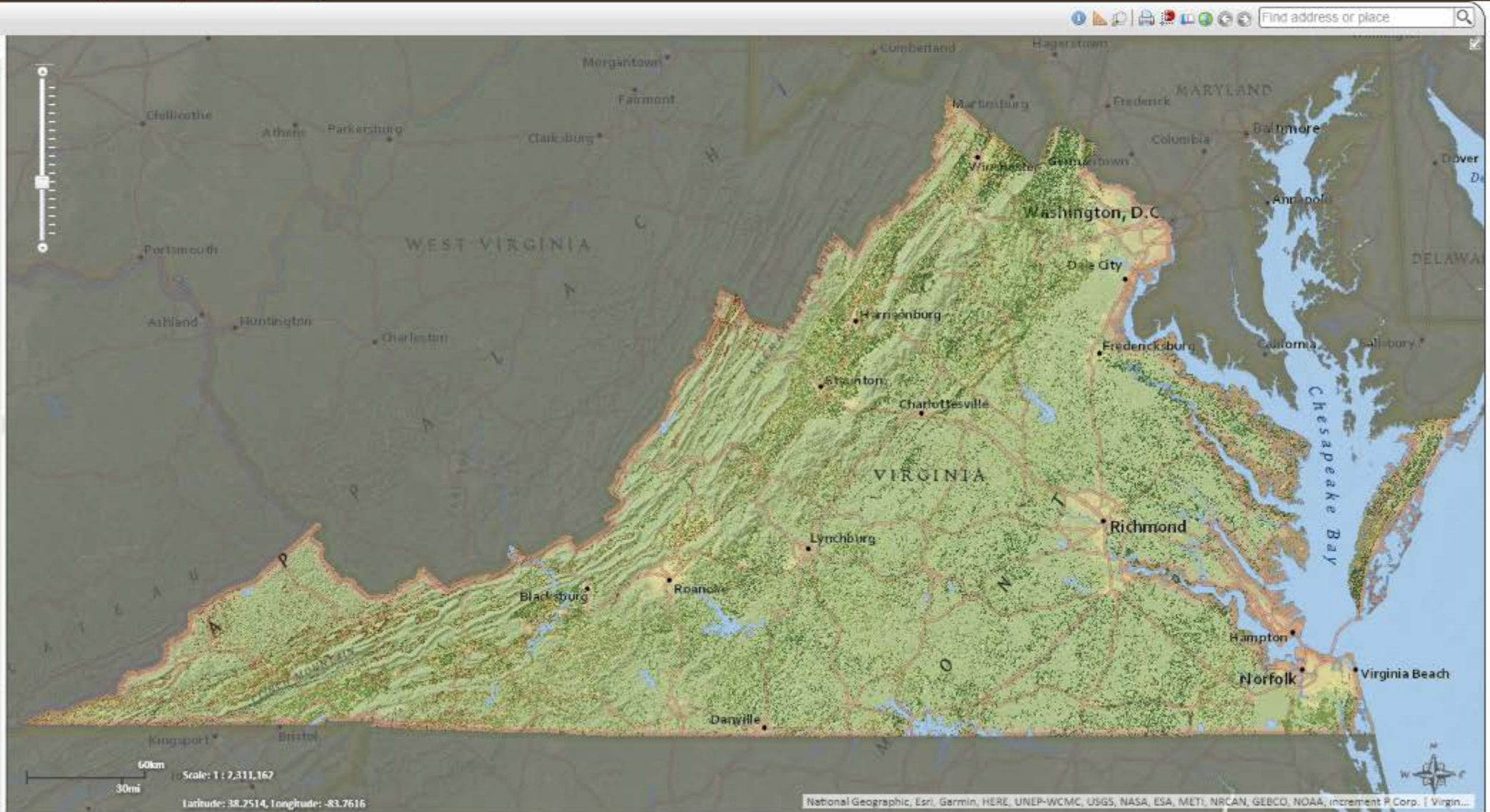
- Potential Rare Species Richness
- Ecological Cores
- Natural Land Network
- Forest Conservation Values
- Watershed Model
- Recreation Access Model
- Cultural Resource Preservation Index
- Agricultural Model
 - Class I (1 - 20; Low Suitability)
 - Class II (21 - 40)
 - Class III (41 - 60)
 - Class IV (61 - 80)
 - Class V (81 - 100; High Suitability)
- Development Vulnerability Model

Reference Layers

- 24K Grid
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- Scenic Rivers
- Streams (NHD)
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Boundaries

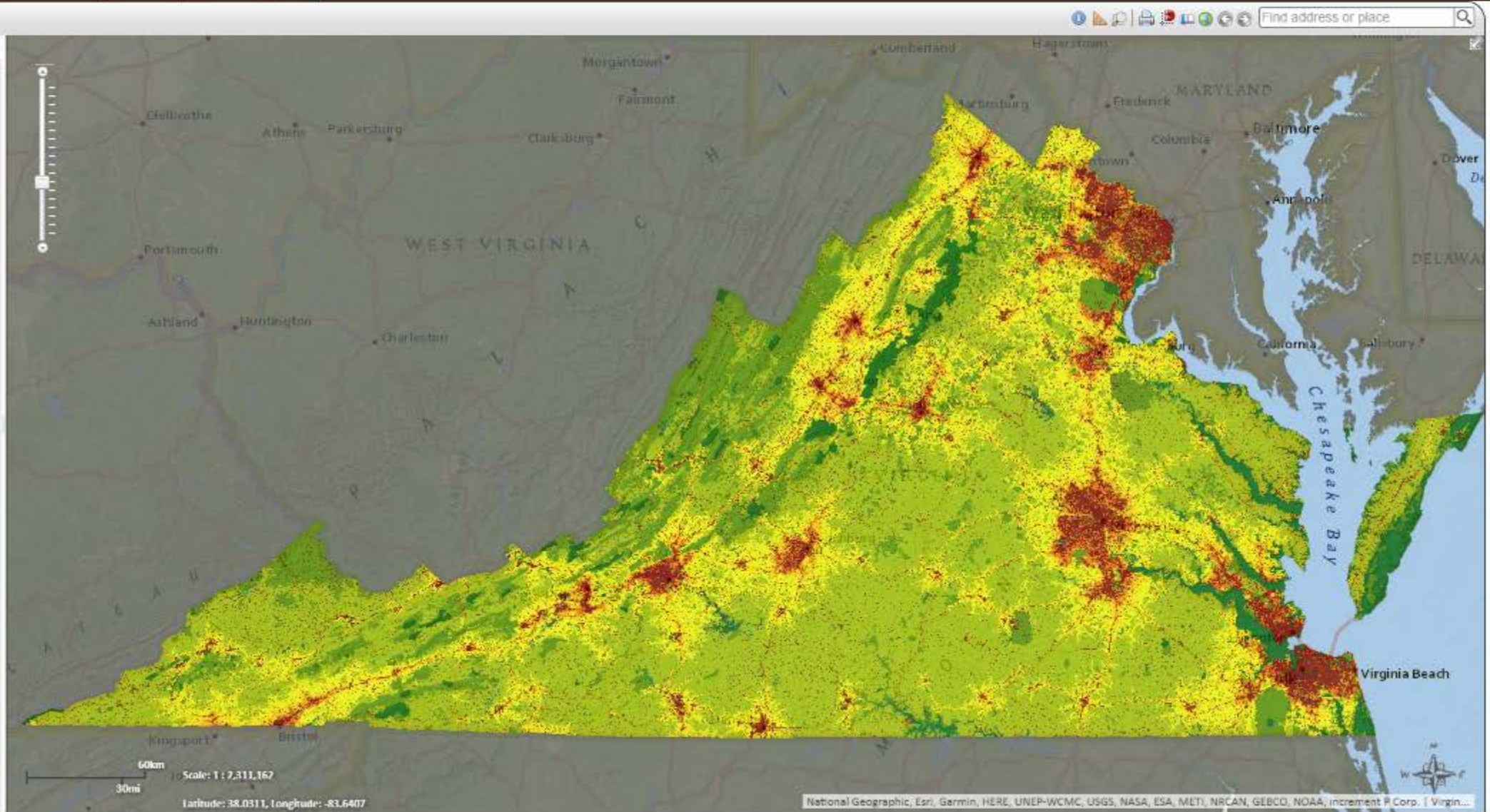
- Counties
- Physiographic Provinces
- Planning Districts



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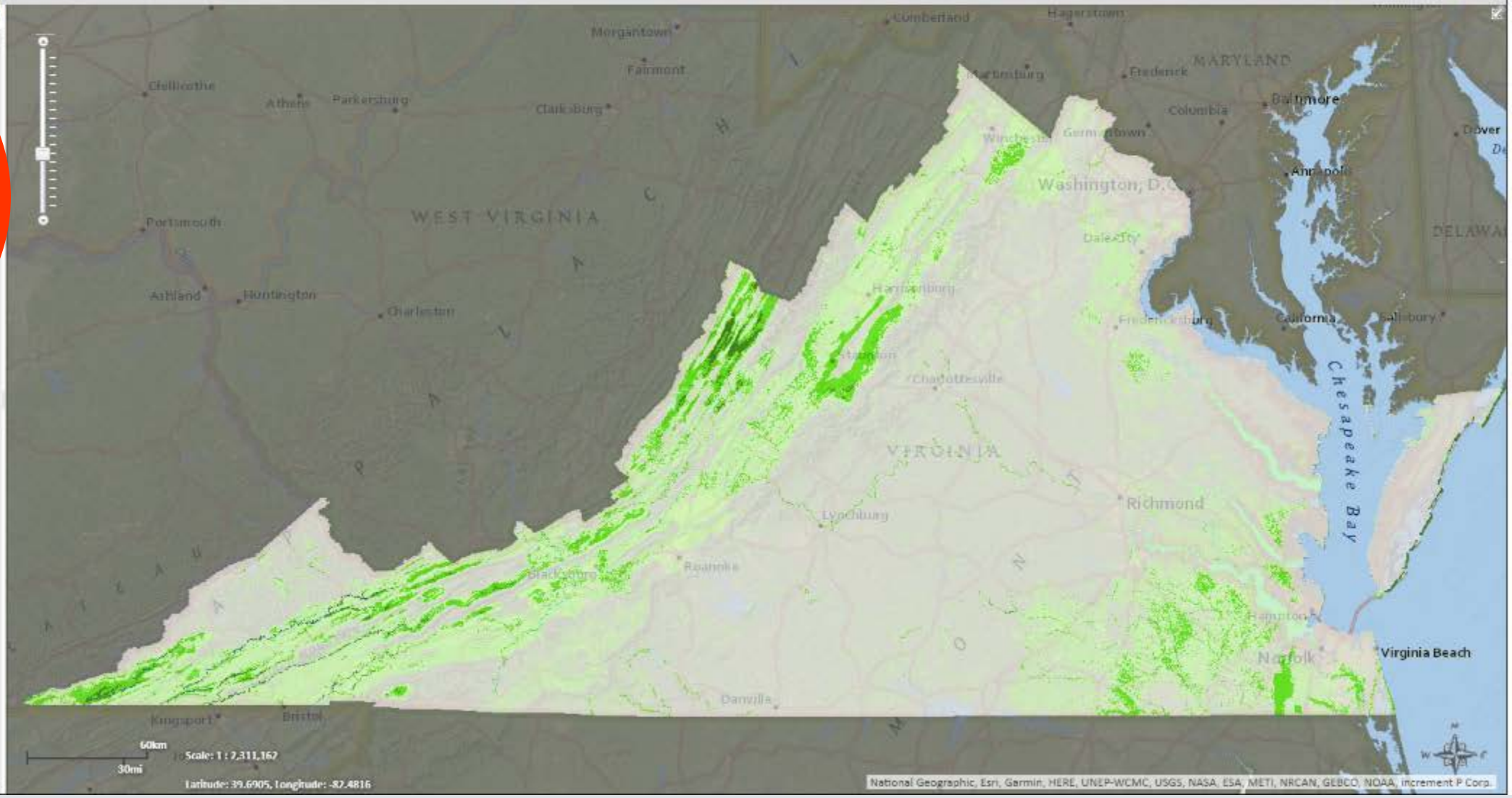
Layers | Make a Map | Feature Search

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- Conservation Planning
 - Potential Rare Species Richness
 - Ecological Cores
 - Natural Land Network
 - Forest Conservation Values
 - Watershed Model
 - Recreation Access Model
 - Cultural Resource Preservation Index
 - Agricultural Model
 - Development Vulnerability Model
 - Undevelopable (0)
 - Class I (1 - 20; Least Vulnerable)
 - Class II (21 - 40)
 - Class III (41 - 60)
 - Class IV (61 - 80)
 - Class V (81 - 100; Most Vulnerable)
 - Already Developed (101)
- Reference Layers
 - 24K Grid
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Layers | Map | Search

- Natural Heritage Resources
 - Documented Element Occurrences
 - Terrestrial Occurrences
 - Aquatic Natural Community
 - Wetlands
 - Historic Wetlands
 - Terrestrial Plant
 - Terrestrial Animal Community
 - Terrestrial Plant
 - Terrestrial Animal
 - Documented NH Screening Layer
 - Conservation Sites
 - DCR
- Predicted Habitats
 - Predicted Suitable Habitats Summary
 - None
 - Low (1-2 species)
 - Medium (3-5 species)
 - High (6-10 species)
 - Diabase Screening Layer
 - Karst Bedrock
 - Predicted Suitable Habitats By Taxa
- Managed Conservation Lands
- ConserveVirginia
- Conservation Planning
 - Potential Rare Species Richness
 - Ecological Cores
 - Natural Land Network



Natural Heritage Resources

- Documented Element Occurrences
- Documented NH Screening Layer

Predicted Habitats

- Predicted Suitable Habitats Summary
- Diabase Screening Layer
- Karst Bedrock
- Predicted Suitable Habitats By Taxa
 - Amphibian
 - Bird
 - Crustacean
 - Fish
 - Insect
 - Mammal
 - Millipede
 - Mussel
 - Non-vascular Plant
 - Reptile
 - Bog Turtle
 - Chicken Turtle
 - Eastern Glass Lizard
 - Loggerhead Sea Turtle
 - Timber Rattlesnake - Coastal Plain Populat
 - Wood Turtle
 - Snail
 - Spider
 - Vascular Plant

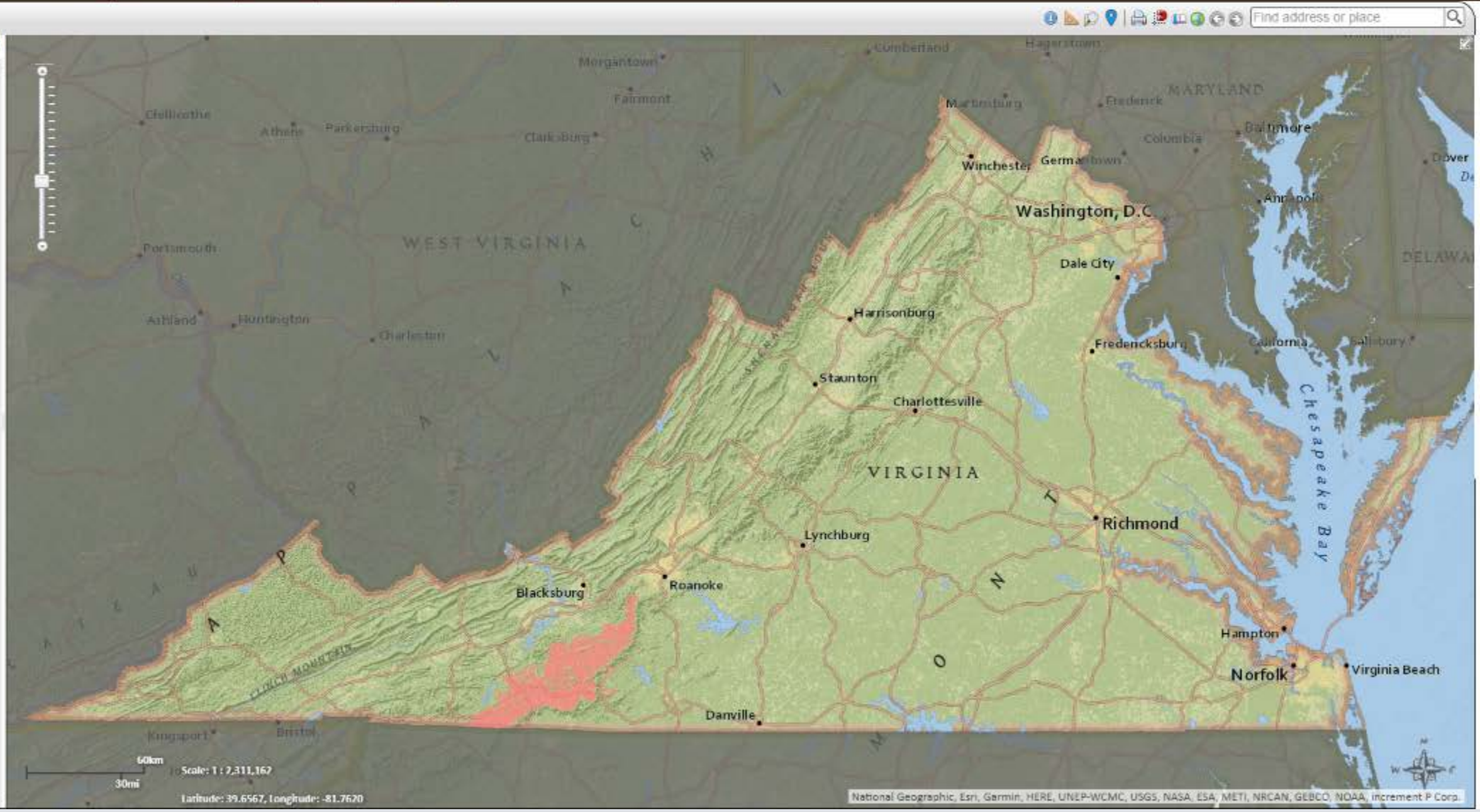
Managed Conservation Lands

- Managed Conservation Lands

ConserveVirginia

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Conservation Planning



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Conserving Virginia's biodiversity through inventory, information management, protection, and stewardship