# DCR's Conservation Lands Database and Conservation Planning

Topics to be covered:

- Land Conservation Data Collection
- Conservation Lands Website
- Land Conservation Planning



### DCR mission

Virginia's dams.



The Department of Conservation and Recreation works with Virginians to conserve, protect, and enhance their lands and improve the quality of the Chesapeake Bay and our rivers and streams, promotes the stewardship and enjoyment of natural, cultural and outdoor recreational resources, and insures the safety of

## Virginia Department of Conservation and Recreation, Natural Heritage Division

- Mission: Identify, protect & conserve Virginia's biological diversity
- Focus on: Rare plants and animals and Natural communities
- Deliver conservation information to inform land conservation and land use decisions
- Manage 48 Natural Area Preserves, 41,774 acres
- **20**<sup>th</sup> Anniversary 1986-2006
- Selected as the Outstanding Natural Heritage
   Program in the Western Hemisphere by
   NatureServe in 2006

## Virginia's Rich Natural Diversity

- 2,546 native plant species place Virginia 13<sup>th</sup> in the U.S.
- 737 native vertebrate species place Virginia 10<sup>th</sup> in the U.S.
- 8th in the U.S. for globally rare animals
- 14th in the U.S. for globally rare plants



Virginia Sneezeweed



Tiger Salamander



Cypress-Tupelo Swamp

## Virginia Land Conservation: Setting Goals and Tracking Progress

- Initial question: what is already protected?
  - DCR had been collecting this data since 1986 as part of the Natural Heritage Database – managed areas
- Increase our effort at tracking land conservation progress.
  - Monthly collection of protected lands boundaries and protection data.
- Launched Conservation Lands Website



## Tracking Land Conservation In Virginia

#### What Has Been Done?

- -How many acres have been protected?
- -Where are the protected lands?
- –Why have they been protected?
- -How strongly are they protected?
- —How are the lands being managed?

## What has already been protected?

#### Protected Acres Statewide

<ul> <li>Federal</li> </ul>	2,412,069
-----------------------------	-----------

• State	465,359
---------	---------

<ul> <li>Private</li> </ul>	113,918
-----------------------------	---------

•	Local	Government	128,264

Total 3,457,120

#### Meeting Virginia's 400,000 Acre Goal

July 1, 2005 - October 31, 2006 Protected Acres

• Federal 678

• State 12,603

• VOF 48,007

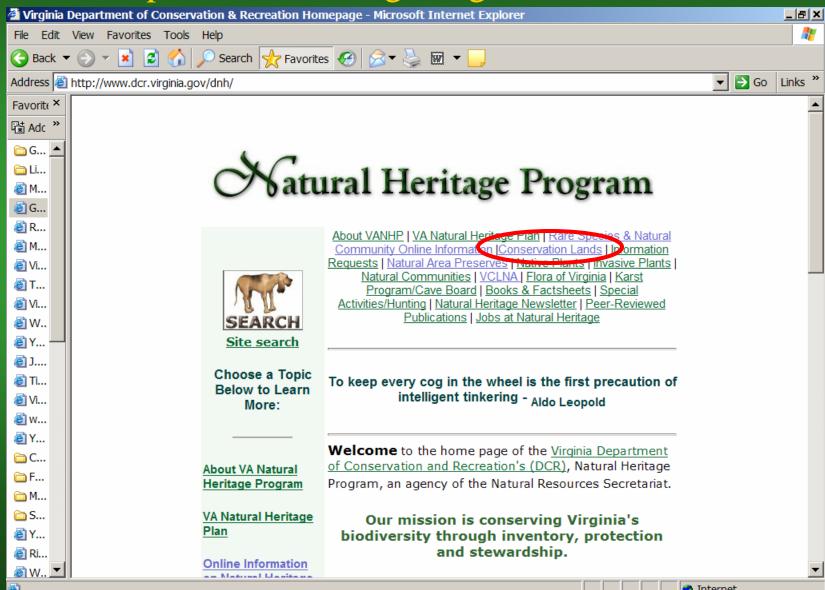
• Private 15,949

• Local Government 3,610

Total 80,847

- 65,763 acres protected in fiscal year 2006
- 15,084 acres protected since July 1, 2006
- 319,153 acres more to achieve the Goal

## Accessing the Conservation Lands Website http://www.dcr.virginia.gov/dnh/conslandindex



## Choose a topic below to learn more.

**Maps Online** 

<u>Database</u> <u>Development</u>

Data Usage/Download

Contributors

**Statistics** 

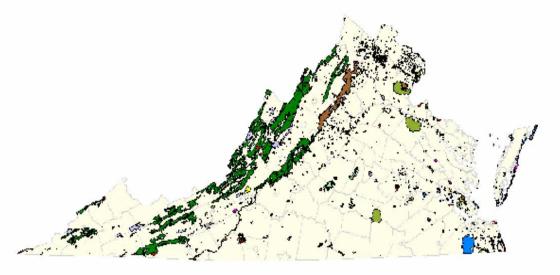
**Feedback** 

VA Office of Land Conservation homepage

<u>Natural Heritage</u> <u>Program</u> <u>Homepage</u>



#### Where are the Protected Lands?

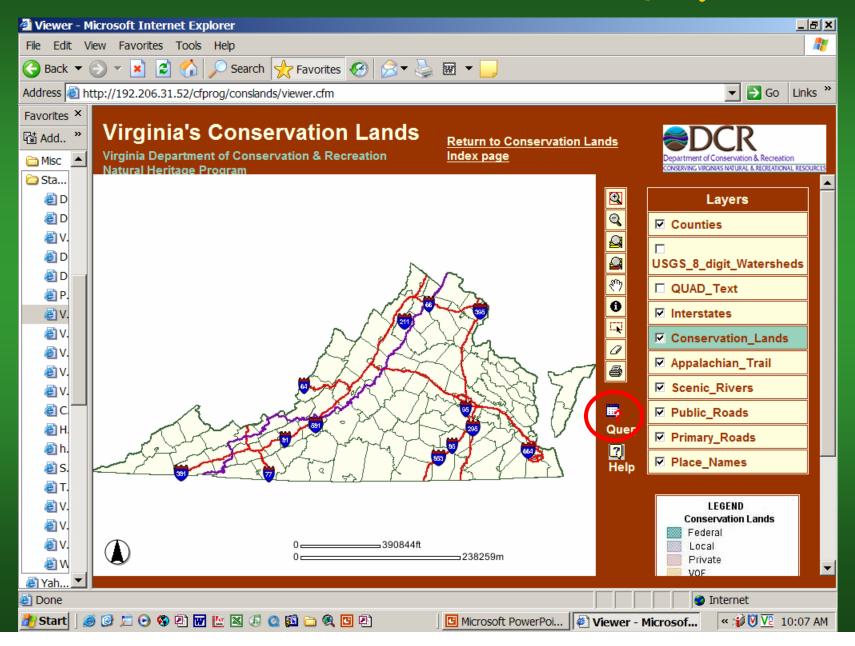


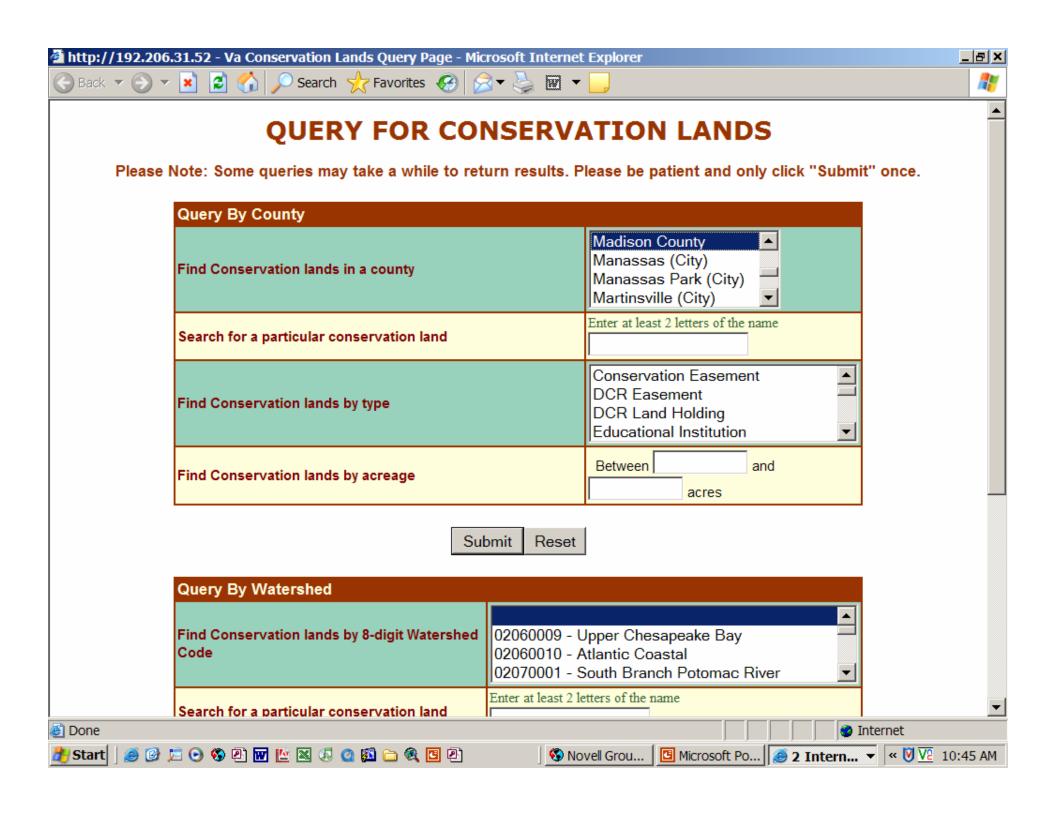
#### **Virginia's Conservation Lands Database**

he Virginia Department of Conservation and Recreation has developed the Commonwealth's first comprehensive, continually maintained GIS data layer for Virginia's protected conservation lands. This database includes mapped boundaries and attributes for public and certain private lands in Virginia that have potential significance for serving a variety of conservation, recreation, and open-space roles. DCR's Natural Heritage Division has developed the database under a charge from the Virginia Land Conservation Foundation and the Department of Technology Planning.

Included are most federal and state lands, regional and interstate lands such as water and park authorities, parks and undeveloped or partially-developed lands owned by localities, lands owned as preserves by non-profit conservation organizations such as The Nature Conservancy, and conservation

#### Conservation Lands Website Query

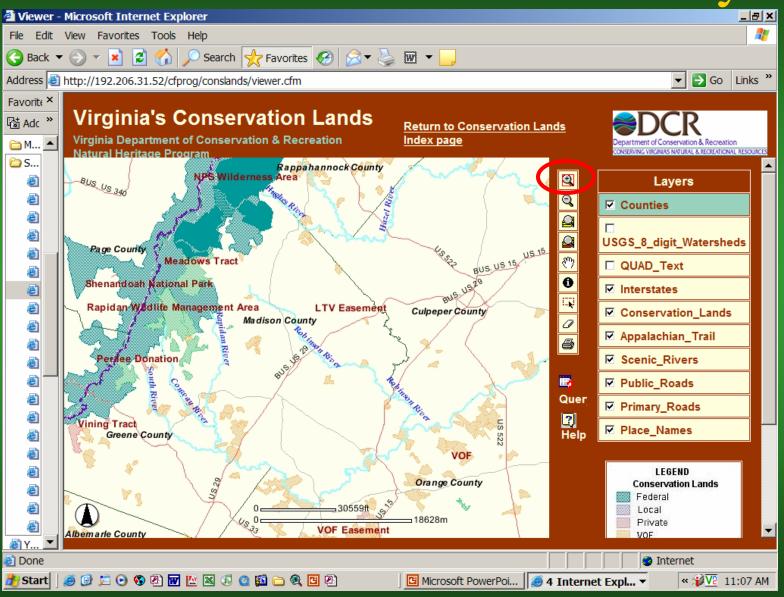




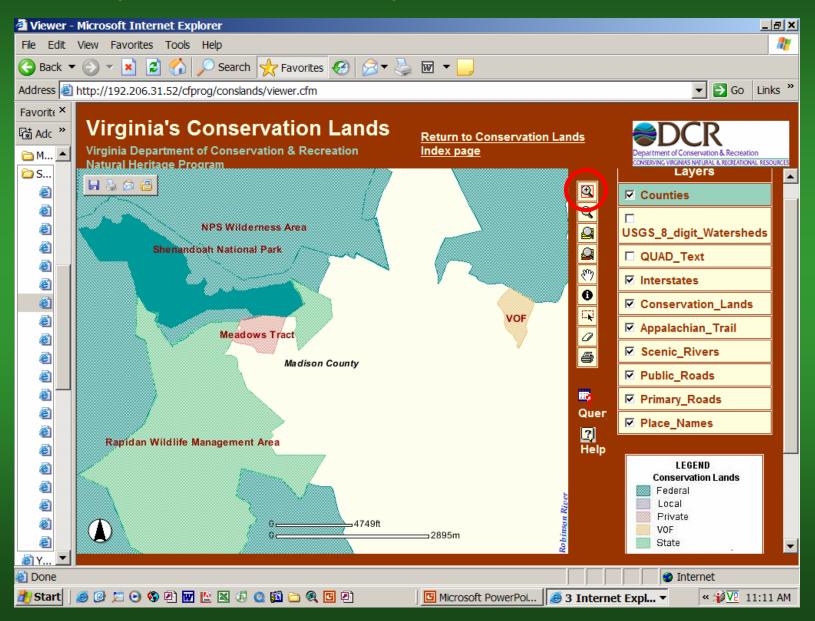
#### Report from Madison County Query



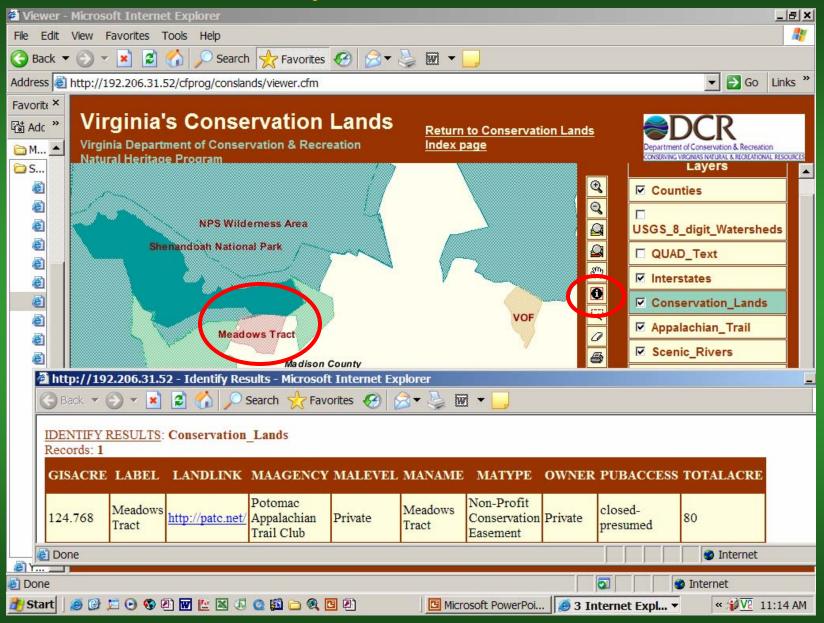
### Zoom In to Madison County



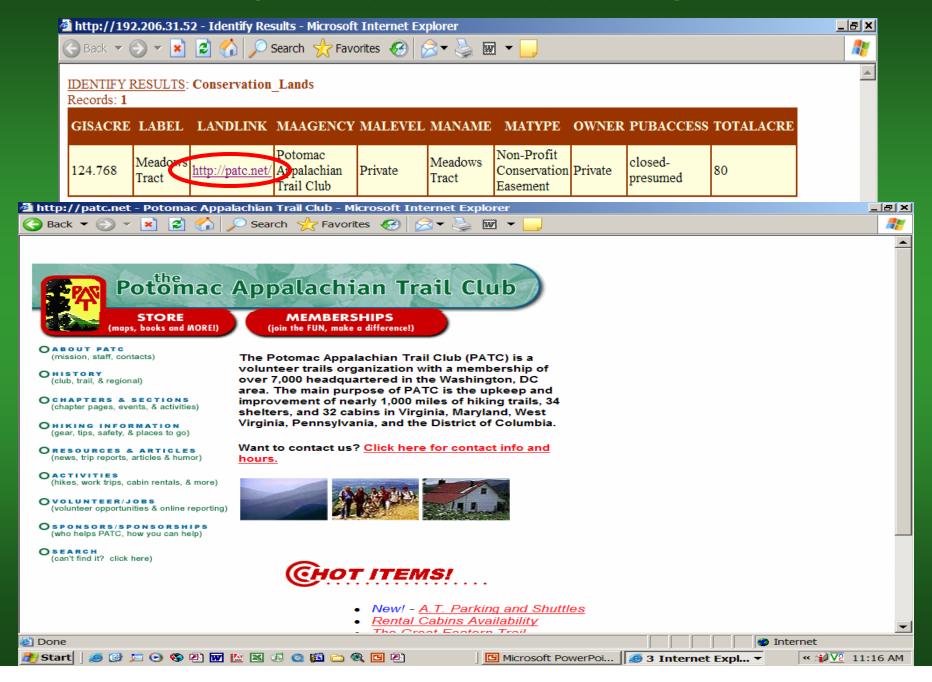
## Why Have They Been Protected?



#### Click Identify on Conservation Lands



#### Click on Link to PATC



### How are the Lands Being Managed?

#### Categories for Biodiversity Management

- 1: Specifically Designated for the Protection of Plant and Animal Communities. Examples include Wilderness Areas, National Forest Special Biological Areas, Research Natural Areas and Roadless Areas, Nature Conservancy Preserves, State Natural Area Preserves, and National and State Parks with a nature focus.
- 2: Designated for the Conservation of Plant and Animal Communities with Limited Impacts Permitted. Examples include many National Fish and Wildlife Refuges, most State Parks, State Wildlife Management Areas, Virginia Outdoors Foundation properties, and natural Stream Valley Parks. The managed area includes an area less than 10% in man-made vegetation and improvements.
- 3: Designated for Natural Resource Conservation and Recreation Use. Examples include most National Forest matrix lands which are used to generate timber, some State Parks with a cultural resource focus such as Staunton River, Sailor's Creek Battlefield, and New River Trail Parks, private timber lands which are not converted from natural forests when logged and that have a chance to become natural forests before they are logged again, private lands under open space easement that may include a Virginia Department of Forestry timber management plan.
- **4**: *No Designation or Management for Conservation of Natural Conditions.* Examples include State or National Parks and Monuments in urban settings, many County, City, and Regional Parks, sportsman club properties, private agricultural lands and lands used for commodity timberland production using nonnative species or monocultures, residential lands, and urban lands.
- **5:** *Unknown Management Intent.* Managed Areas for which management intent is currently unknown. These lands need to be investigated further before a management status rank is assigned.

## Land Conservation Reporting

#### **Every month** DCR will report:

- Total number of new acres permanently protected via fee simple acquisition.
- Total number of new acres permanently protected via easement.
- The information will be reported in four categories, federal, state, local, and private by DCR on the 15<sup>th</sup> of the month, every month.

Every six-months DCR will collect data on 12 specific attributes for each parcel protected during that six month cycle and will produce reports on February 15 for July – December and August 15 for the first six months of the year.

- Considerable private and public efforts have been made towards conservation of Virginia lands.
- The Conservation Lands database can tell us what has been done so that we can answer the question of what needs to be done next.

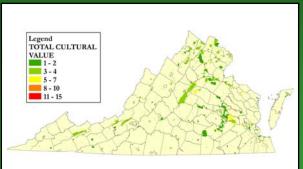
#### STRATEGIC LAND CONSERVATION QUESTIONS INCLUDE:

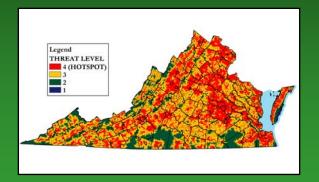
- What is our vision for the resources that need protection?
- How can we determine if we are doing a good job?
- How many resources have been captured by these lands?
- What is the goal for how many more need to be protected and over what time frame?



## Virginia Land Conservation Needs Assessment **Ecological Cultural Assets Vulnerability**



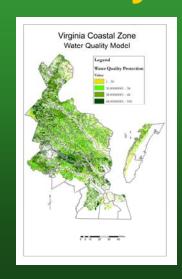




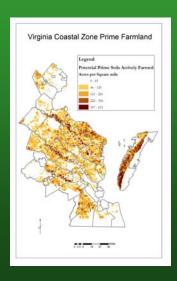
## **Economics**

## Virginia Coastal Zone Recreation Model Virginia Coastal Zone Forest Economics 48.00000001 - 64 64.00000001 - 77

### **Forest** Recreation Water Quality



#### **Prime Farmland**



#### **Prime Farmland Model**

### Virginia Data Layers

- USDA Natural Resources
   Conservation Services Soil Survey
   data
- · Land Cover data
- National Elevation Dataset (Slope)

2 and all address add.

