



PNDI Environmental Review Tool *Upgrade*

July 15, 2014



pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES

Act 18



Act 18: Conservation and Natural Resources Act

Section 305 Ecological and Geologic Resources:

Gives DCNR authority to:

- inventory ecological resources of the Commonwealth and make data available

DCNR implements Act 18:

through PA Natural Heritage Program

- Inventories
- PNDI
- Ecological studies

Who is the PA Natural Heritage Program?



Partners



*Member of International
Network of Heritage
Programs*



In Cooperation With





PNHP Mission

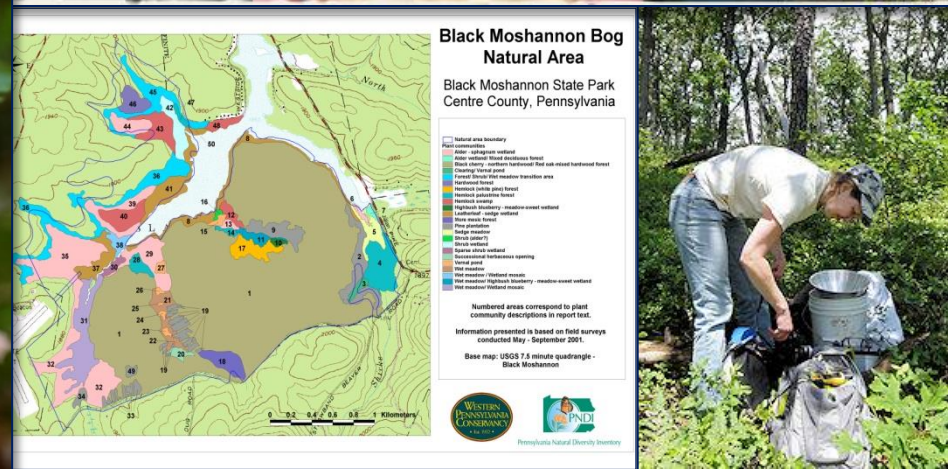
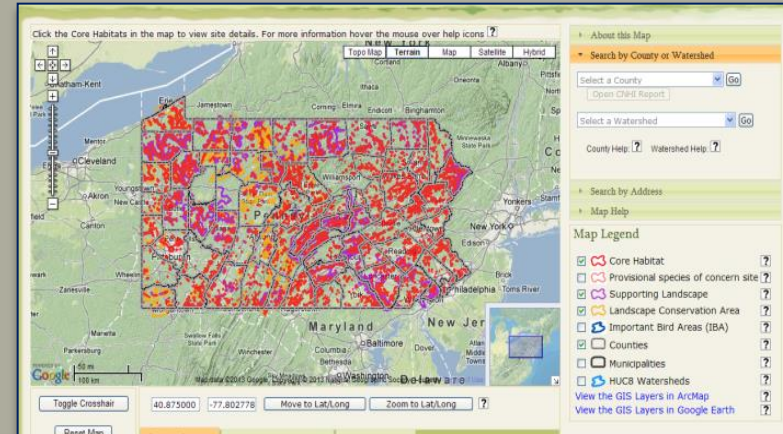
The Pennsylvania Natural Heritage Program provides scientific information, expertise, and assistance to support the conservation of biological diversity

GOALS:

- To be the most trusted, accurate, up to date, comprehensive source of natural heritage information for Pennsylvania
- In the context of PNHP's conservation priorities, promote, maintain and develop biodiversity conservation products and services marketed towards constituents

What Does PNHP Do?

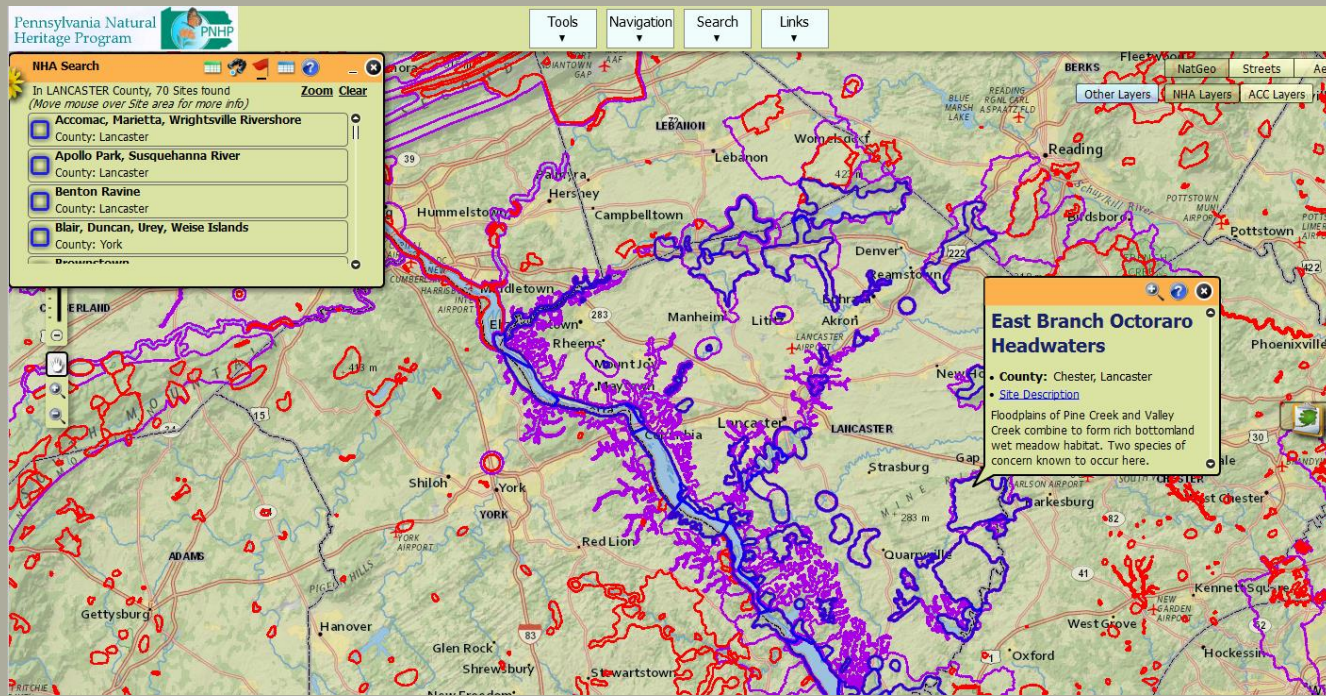
- Inventory
- Data Management
- Planning Tools
- PNDI
- Website Information
- Other projects:
classifications, other studies



Current PNDI Planning & Review Process

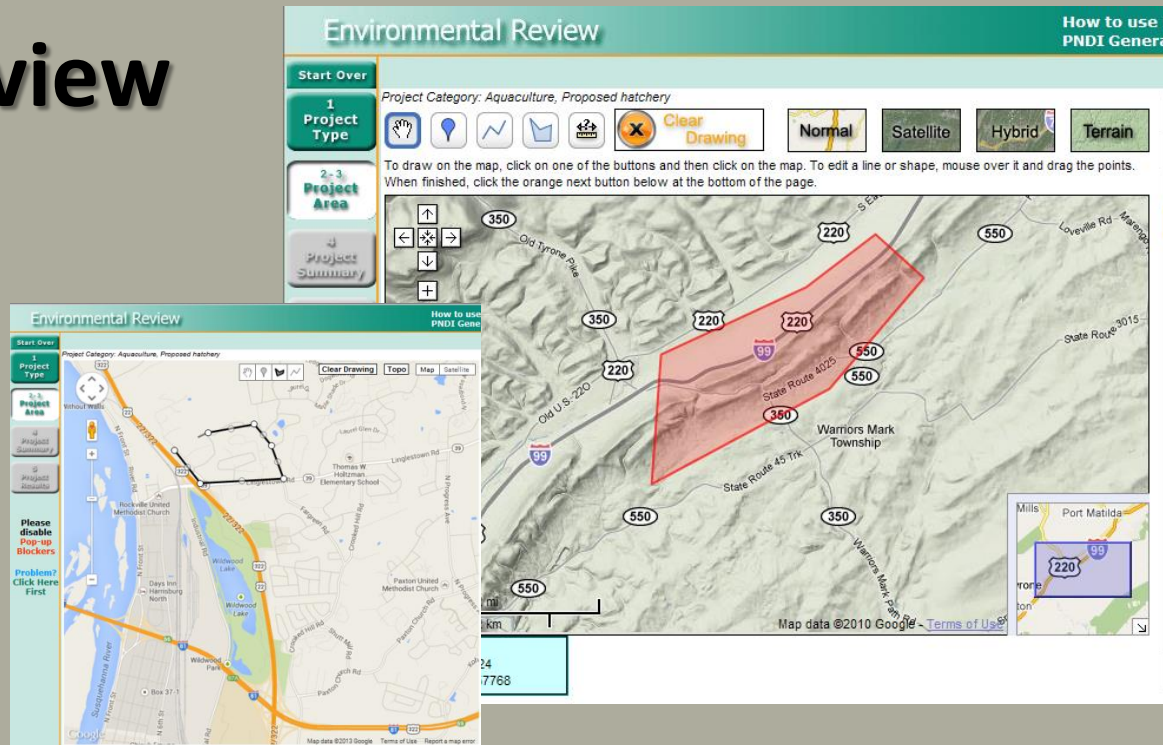


Current Planning Process Overview



- County Natural Heritage Inventories
- County Inventory Interactive Map
 - View entire report by county
 - View inventory areas within county, click on individual area reports

Environmental Review Process Overview



- First of its kind
- Flagship for other T&E/conservation tools in US
- Quickly screens projects
 - Applicant provides project area and information
 - Immediate response
 - Provides BMP's for potential impacts
 - Provides contact info for agency coordination

Annual Usage



~ 55,000: Total number of Screenings

~ 67%: No Potential Impact or Species in vicinity

~ 33%: Potential Impacts or Species in vicinity

~ 16,600: PNDI screenings in connection with DEP permitting programs

~ 2% (300-400): Surveys requested by DCNR, FBC, PGC

Recent Improvements

2012-2013



- 2-year review/letter lifespan
- Improved Mapping: Google basemaps
- Ability to view much larger projects-search area
- More Conservation Measures (reduces need for agency consultation)

Planned Improvements

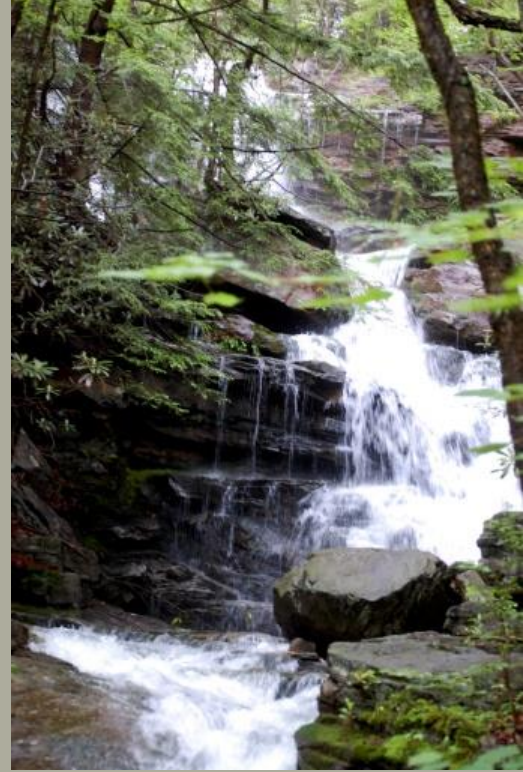


Why a new tool?

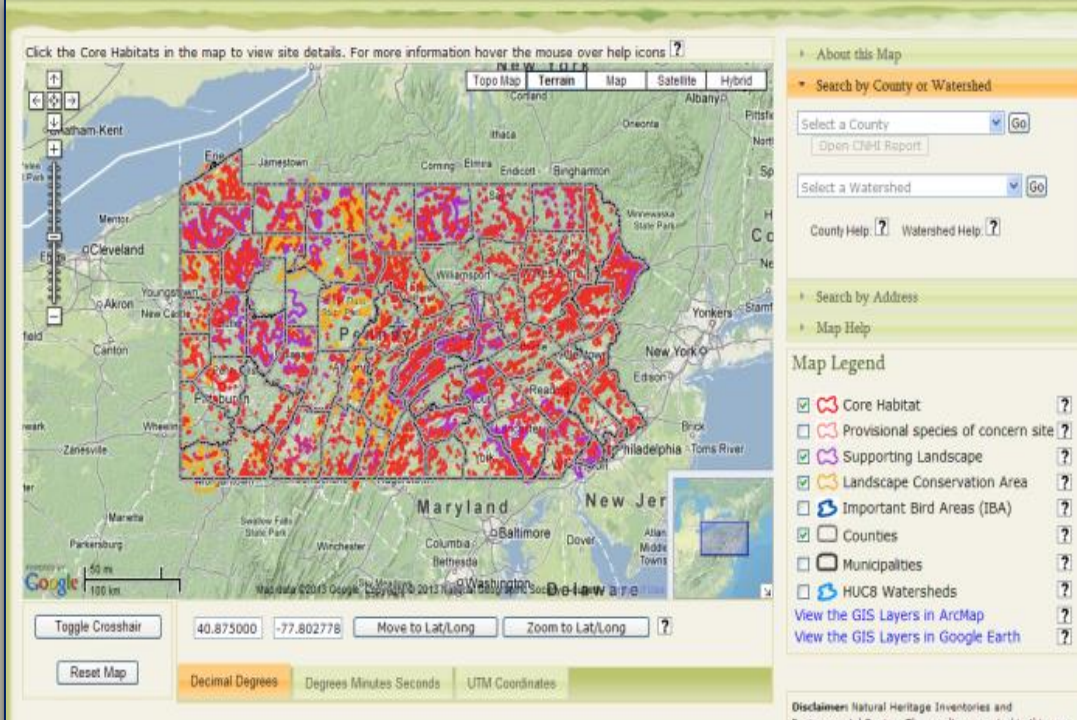
- Existing tool nearing end of functional lifespan as software and technology age. Updated technology allows for a more versatile tool
- While many changes have been made to existing tool, ability to significantly upgrade tool is limited
- Better meet the needs of users



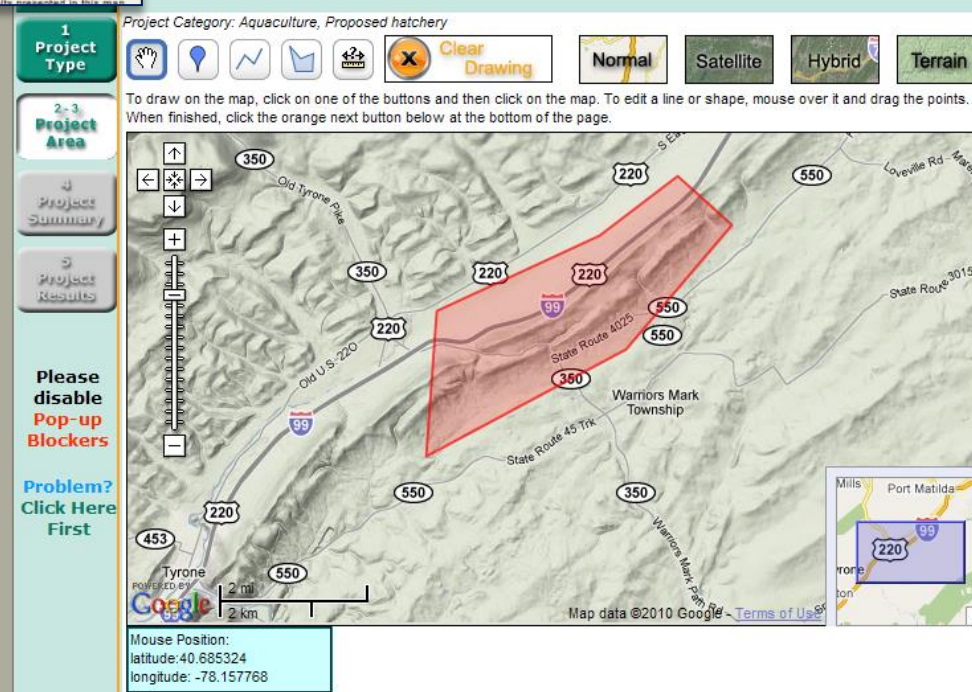
Goals of New Tool



- Upgrade tool to have improved user interface
- Combine Planning and Review functions
- Provide visual information regarding species habitats
- Better meet the needs of users while also maintaining protection of species and their habitats



Current "Planning" & "Project Review" Tools.
Will put the tools together—to form a tool
that has both a planning function and
screening function



POTENTIAL Improvements

- **Administrative functions**
 - Improved ability to make tool changes, upgrades and fixes
- **Improved User interface**
 - Clicking conservation info on/off
 - Improved mapping
 - User accounts—save projects
- **Visual Species Habitat Info**
 - Public: see conservation information for planning
 - Review and Surveys: users register see visible species habitat for the review process
- **Updated species polygons:**
 - Move from the use of mostly Generic species buffers vs Species Habitat-based polygons
 - Improved ability to see areas of potential habitat conflict/impact
- **Project Submission**
 - Submit to agencies via tool
 - Project status and tracking

Conservation Planning and Environmental Review Tool

Potential changes to combine Conservation Planning and Environmental Review functions into a single tool

Conservation Planning

- Allows project pre-planning
- Know what impacts may be likely
- Ability to include other ecological and planning information (e.g. soils, wetlands, state & federal lands, stream designations, etc.)

Environmental Review

- Conduct Project screenings, like now
- Visible species habitat information
- Additional Conservation Measures
- Allow online submission of project files
- Receipt clarification

Access to Information

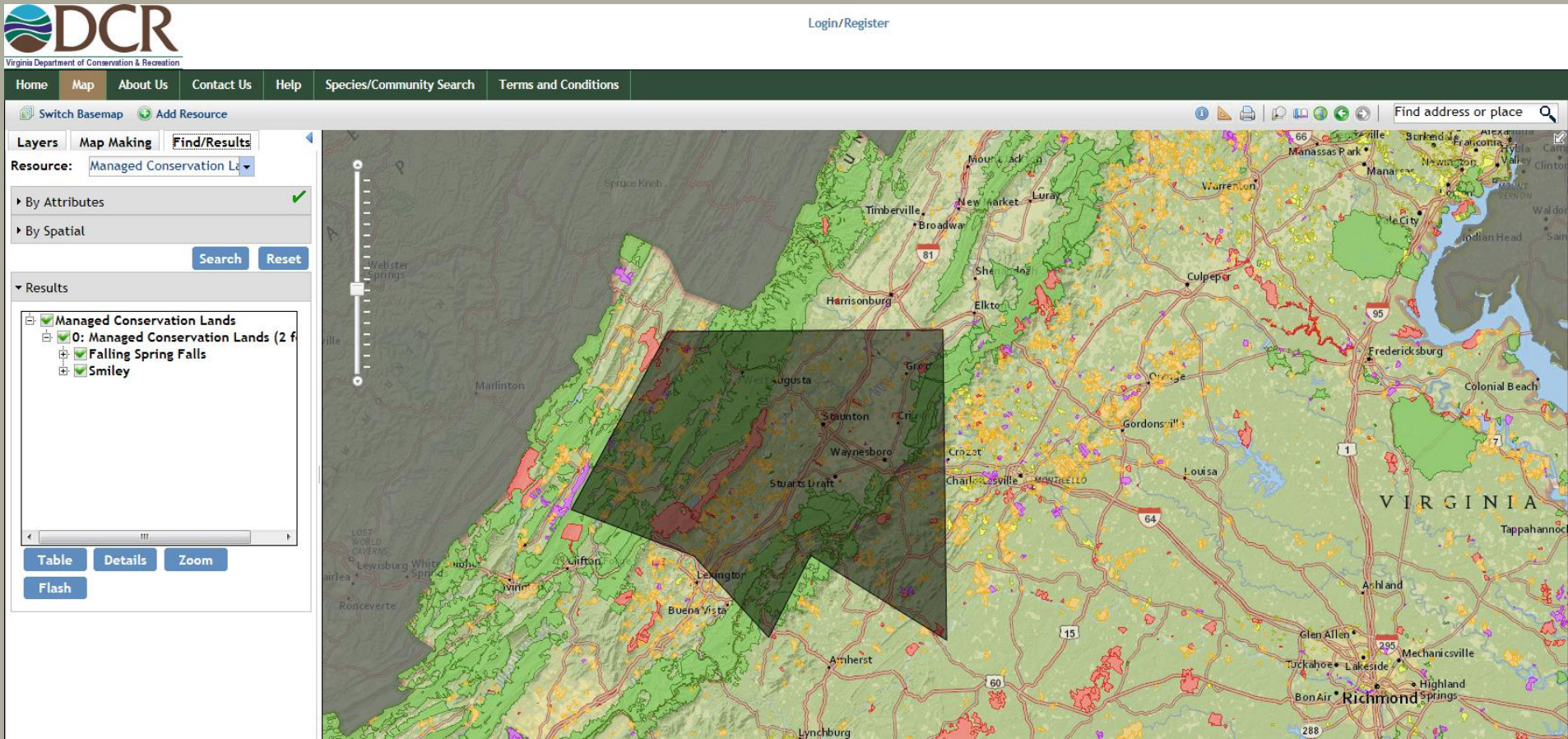


- **Ability to provide tiered-level of access**
 - Register users
 - Confidentiality/data agreements when necessary
- ***Potential* Access Levels:**
 - **Public:** general access to conservation information, T&E info within general Natural Heritage Areas
 - **Planning & Review:** user registers, access to visible state agency T&E and special concern species information
 - More detailed information to come as specifics are determined
- **Proposed tool will be most advanced T&E info dissemination in U.S.**
 - Will provide more visible information on T&E species than any other state
 - With the visible info & the current project screening—is most advanced

Project Planning

Examples of the VA Natural Heritage Program's Natural Heritage Data Explorer

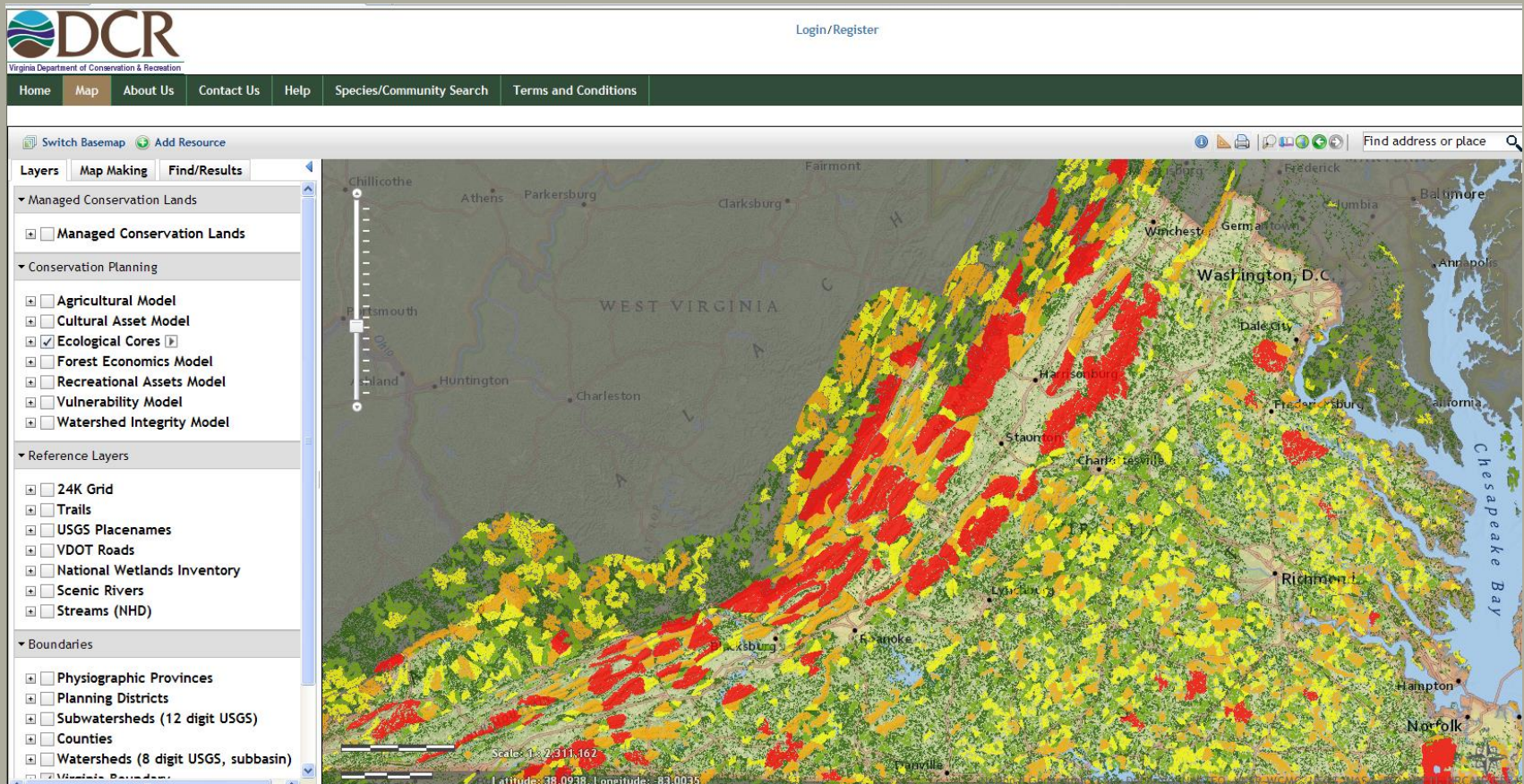
This is an example of what it could look like to draw in a project area based on the recent changes VA made.



Project Planning

Examples of the VA Natural Heritage Program's Natural Heritage Data Explorer

This is an example of what the improved user interface could look like based on the recent updates VA made.



Project Planning

Examples of the VA Natural Heritage Program's Natural Heritage Data Explorer

This is an example of what the improved user interface could look like based on the recent updates VA made.



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Layers **Map Making** **Find/Results**

▼ Managed Conservation Lands

☐ Managed Conservation Lands

- ☐ Federal
- ☐ Local
- ☐ Private
- ☐ State
- ☐ VOF Easement

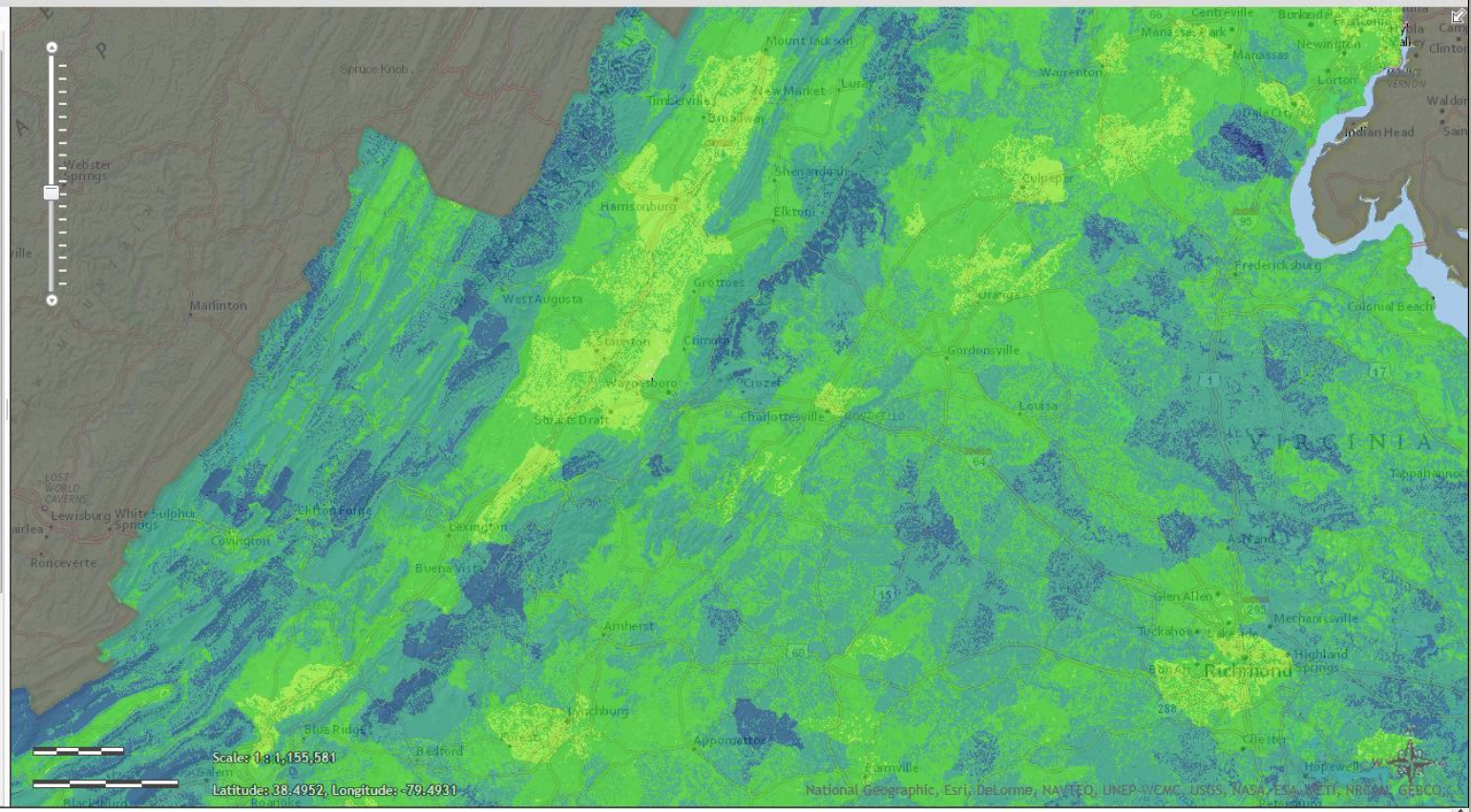
▼ Conservation Planning

- ☐ Agricultural Model
- ☐ Cultural Asset Model
- ☐ Ecological Cores
- ☐ Forest Economics Model
- ☐ Recreational Assets Model
- ☐ Vulnerability Model
- ☒ Watershed Integrity Model

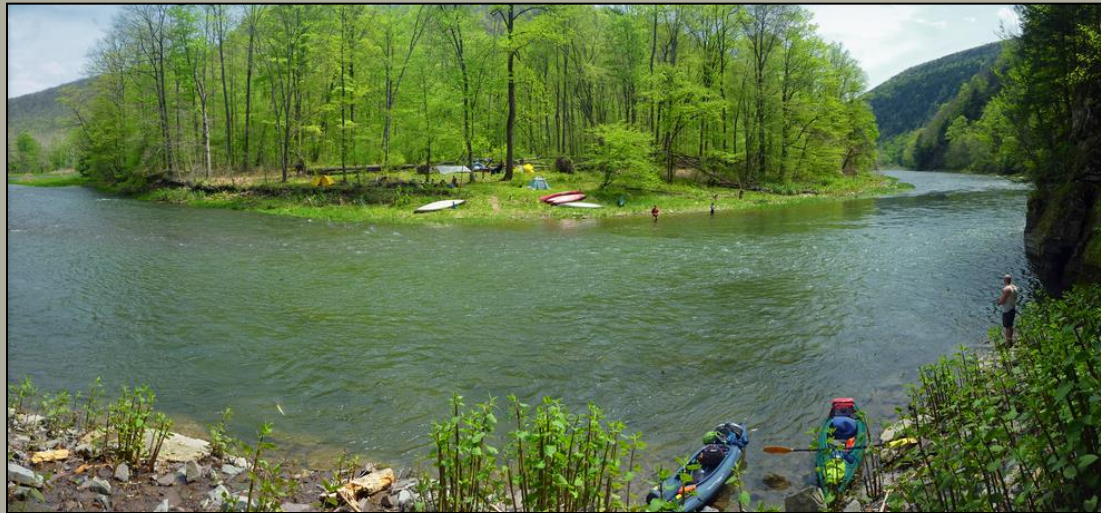
- ☒ 5: Outstanding
- ☐ 4: Very High
- ☐ 3: High
- ☐ 2: Moderate
- ☐ 1: General

▼ Reference Layers

- ☐ 24K Grid
- ☐ National Wetlands Inventory
- ☐ Scenic Rivers
- ☐ Streams (NHD)
- ☐ Trails
- ☐ USGS Placenames
- ☐ VDOT Roads



National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCNA, GEBCO, etc.



Who will develop new tool?

- DCNR leading tool development:
 - with PNHP partners PGC, PFBC, WPC and USFWS
 - DEP feedback and development
 - User and Stakeholder comments, suggestions and feedback
- NatureServe is contractor: on board July 1, 2014

Next Steps



- Finalize requirements & needs for new tool
- Feedback sessions with users & stakeholders
- New Tool development, testing
- Roll out early 2015
- Trainings for users 2015

Thank You!

Questions or Comments?

Email:

RA-HeritageReview@PA.GOV