PA Conservation Explorer

June 2015

pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES

Topics for today

Current Conservation Tools

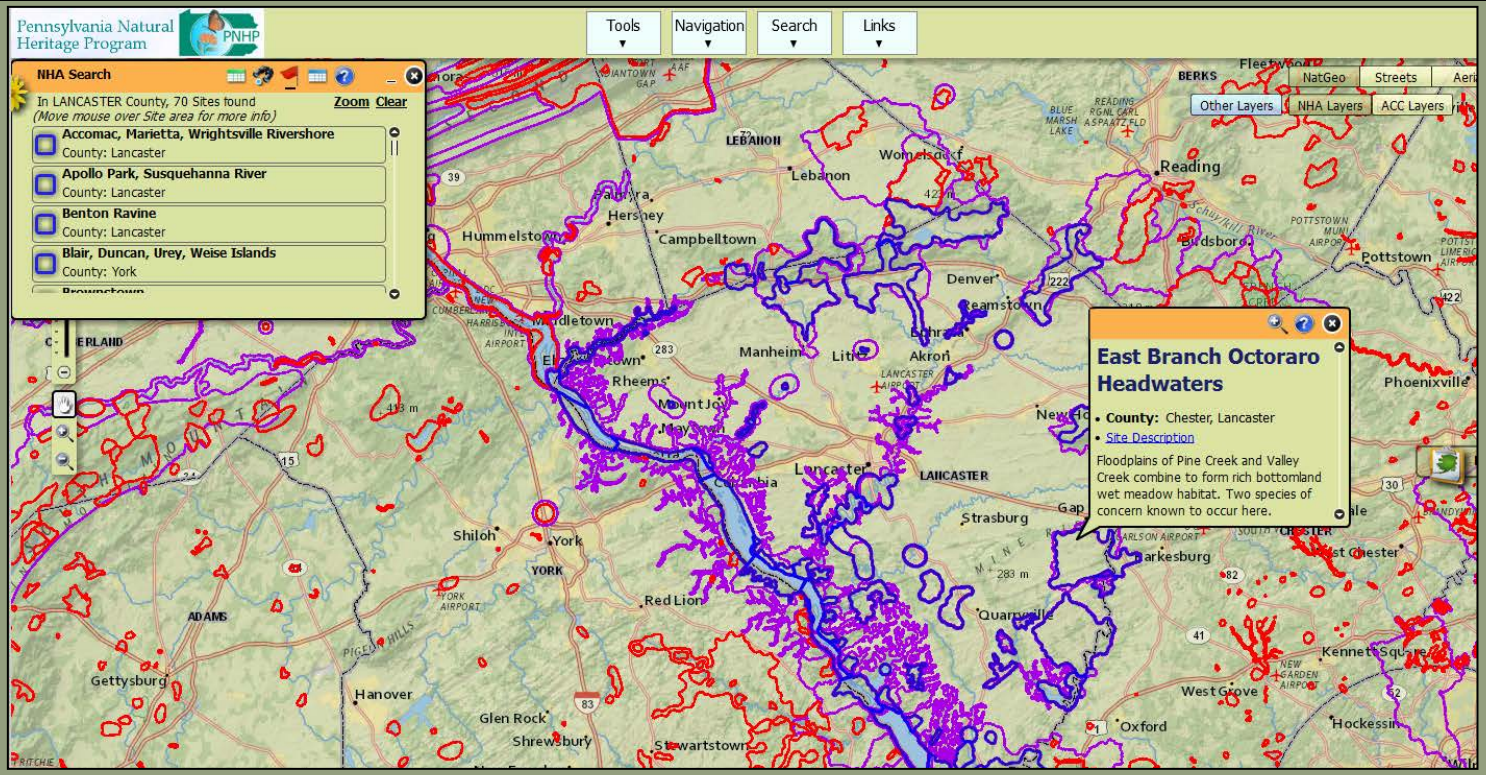
PA Conservation Explorer

- Conservation Planning
- PNDI Environmental Review

Next Steps

Current Conservation Tools

Current Planning Tool

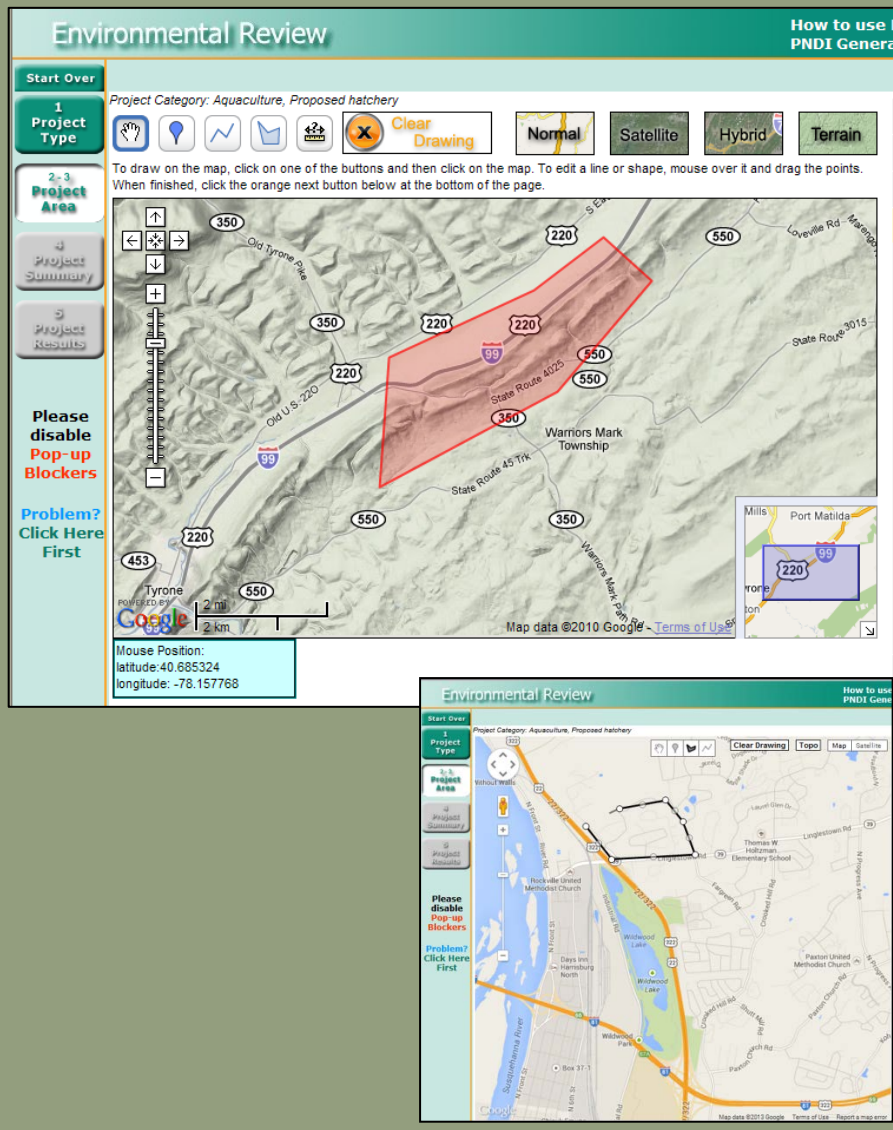


- **County Natural Heritage Inventories & Interactive Map**
  - View entire report by county
  - Click to get individual area reports
  - Limited threatened and endangered species information

PNDI Environmental Review Tool

2005-2015

- First of its kind launched in 2005.
- Model for other states that followed, AZ, VA, NC, LA
- Pennsylvanians conduct **50,000 online searches** per year. Majority No Impact
- An effective screening tool for projects.
- Quickly screens projects for potential impacts to T/E species
- Existing tool nearing end of lifespan as software and technology age.



Environmental Review - Windows Internet Explorer

http://www.gis.dcnr.state.pa.us/hgis-er/mainViewer.aspx

Environmental Review

Environmental Review

How to use ER
PNDI General Info

Start Over

1 Project Type

2-3 Project Area

4 Project Summary

5 Project Results

Please disable Pop-up Blockers

Problem? Click Here First

Project Category: Energy Storage, Production, and Transfer, Energy Production (generation), Oil or Gas - new wells, expansion of well field

Clear Drawing | Normal | Satellite | Hybrid | Terrain

To draw on the map, click on one of the buttons and then click on the map. To edit a line or shape, mouse over it and drag the points. When finished, click the orange next button below at the bottom of the page.

Lat/Long: Decimal Degrees

Lat/Long: Degrees Minutes Seconds

Search by (Address, City, Zip, or County)

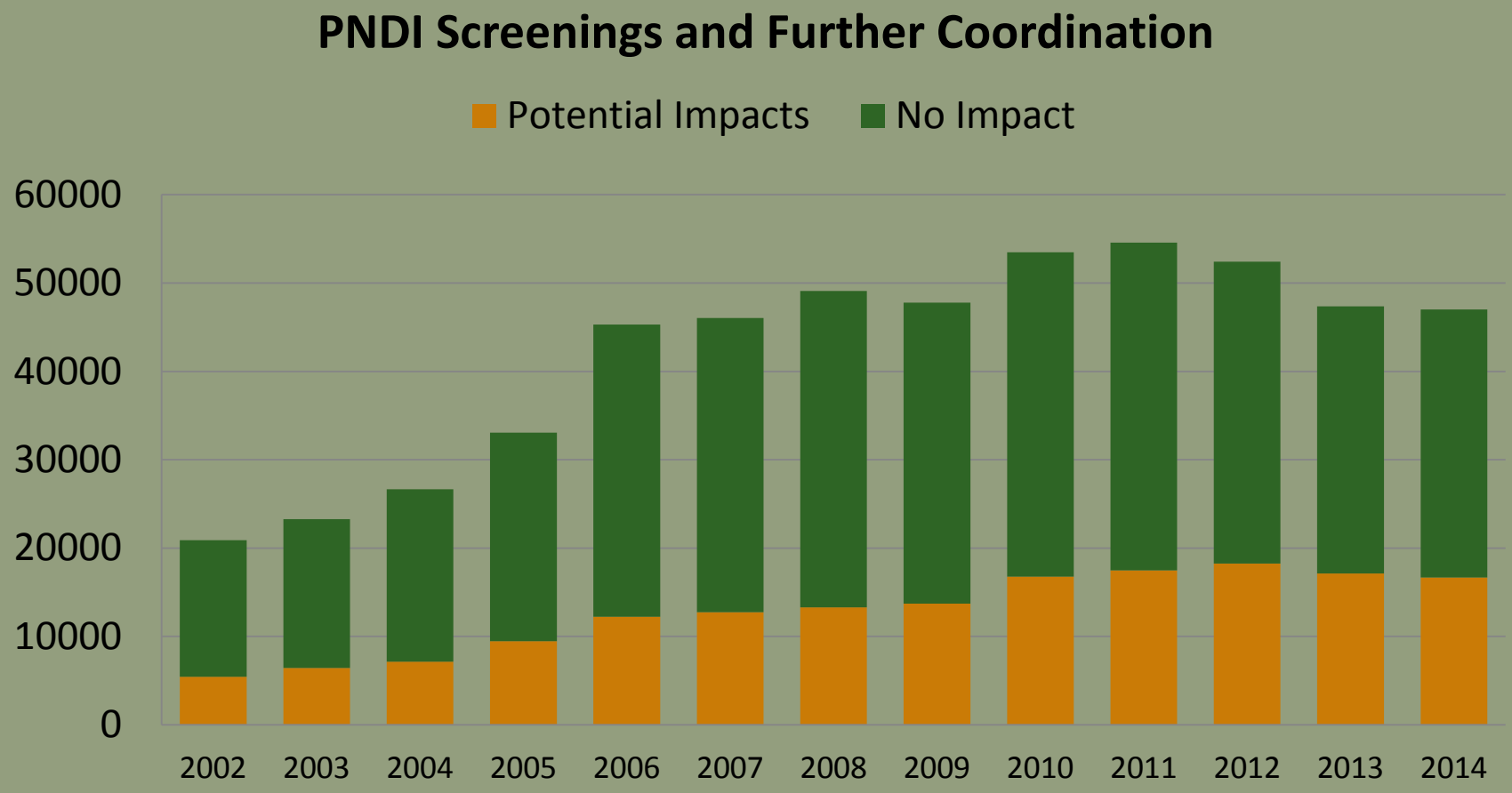
Project/Drawing Dimensions & Measuring Results

```
Project Area:
Square Miles: 3.2868
Square Acres: 2103.5341

Overall Height & Width:
Width: 12682
Height: 14941

Current Segment Length :
Feet:14773
Meters:4503
```

Project Size Limitations
15,000 feet East/West x 15,000 feet North/South.
Approximately 3.03 miles East/West and 3.03 miles North/South.

Note: These have not changed from original map constraints.

Usage


PNDI Screenings and Further Coordination
Potential Impacts
No Impact
60000
50000
40000
30000
20000
10000
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014

Usage

~ 50,000: Total number of Screenings

~ 67%: No Coordination Required or No Species in vicinity

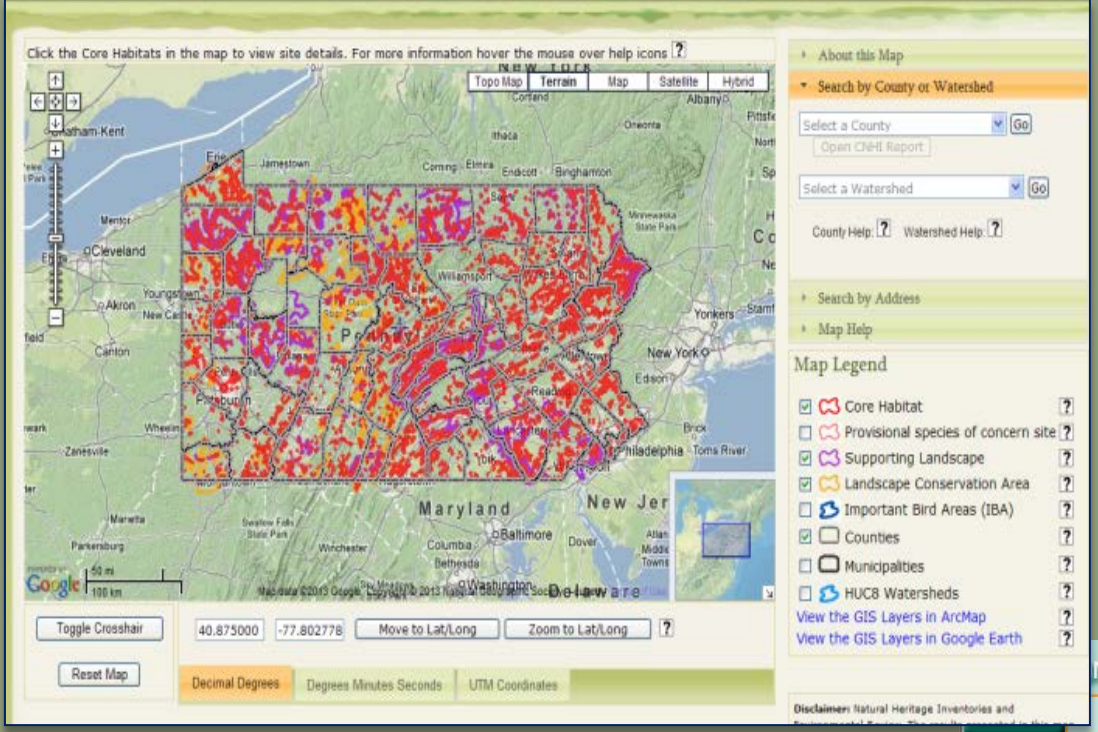
~ 33%: Further Coordination Required or Species in vicinity

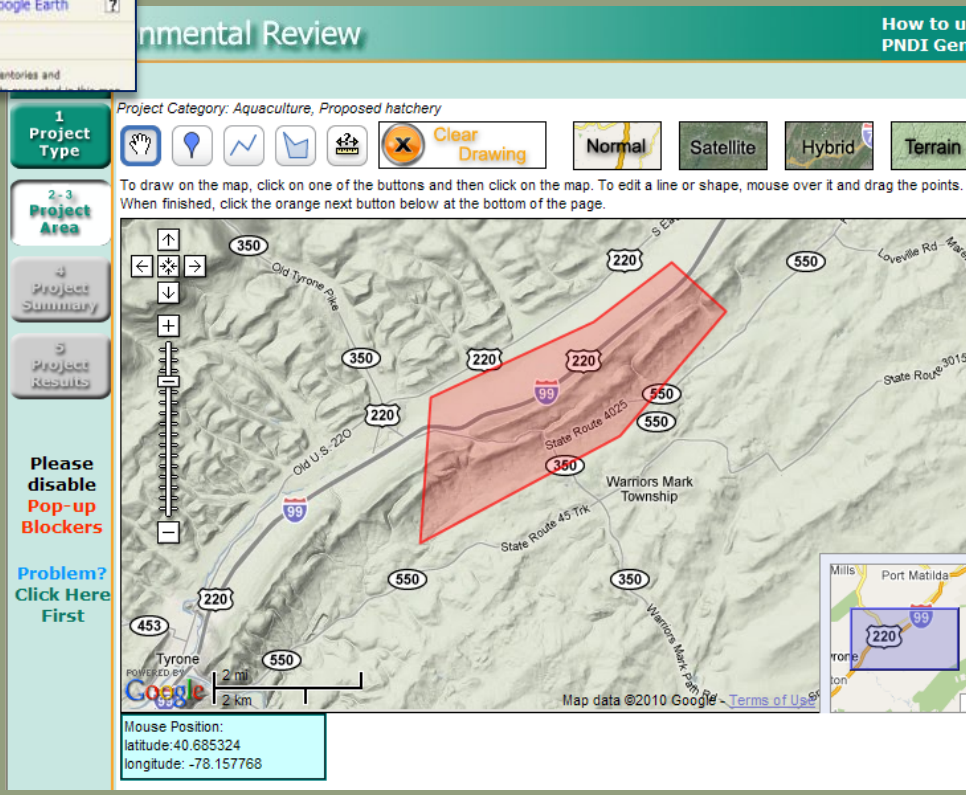
~ 16,600: PNDI screenings in connection with DEP permitting programs

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

Planned Improvements

2 Tools in 1





Combine Planning & Review

Goals

- Tool to support conservation and project planning
- Improved user and administrative capabilities
- Improved access to PA's conservation information
- Protect species from disturbance or potential impacts

PA Conservation Explorer

Conservation Planning & PNDI Environmental Review Tool

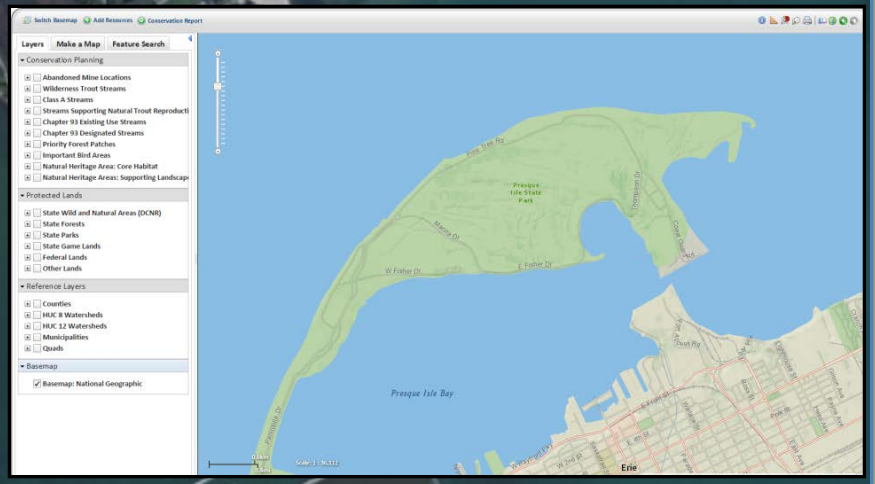
Conservation Planning & Environmental Review

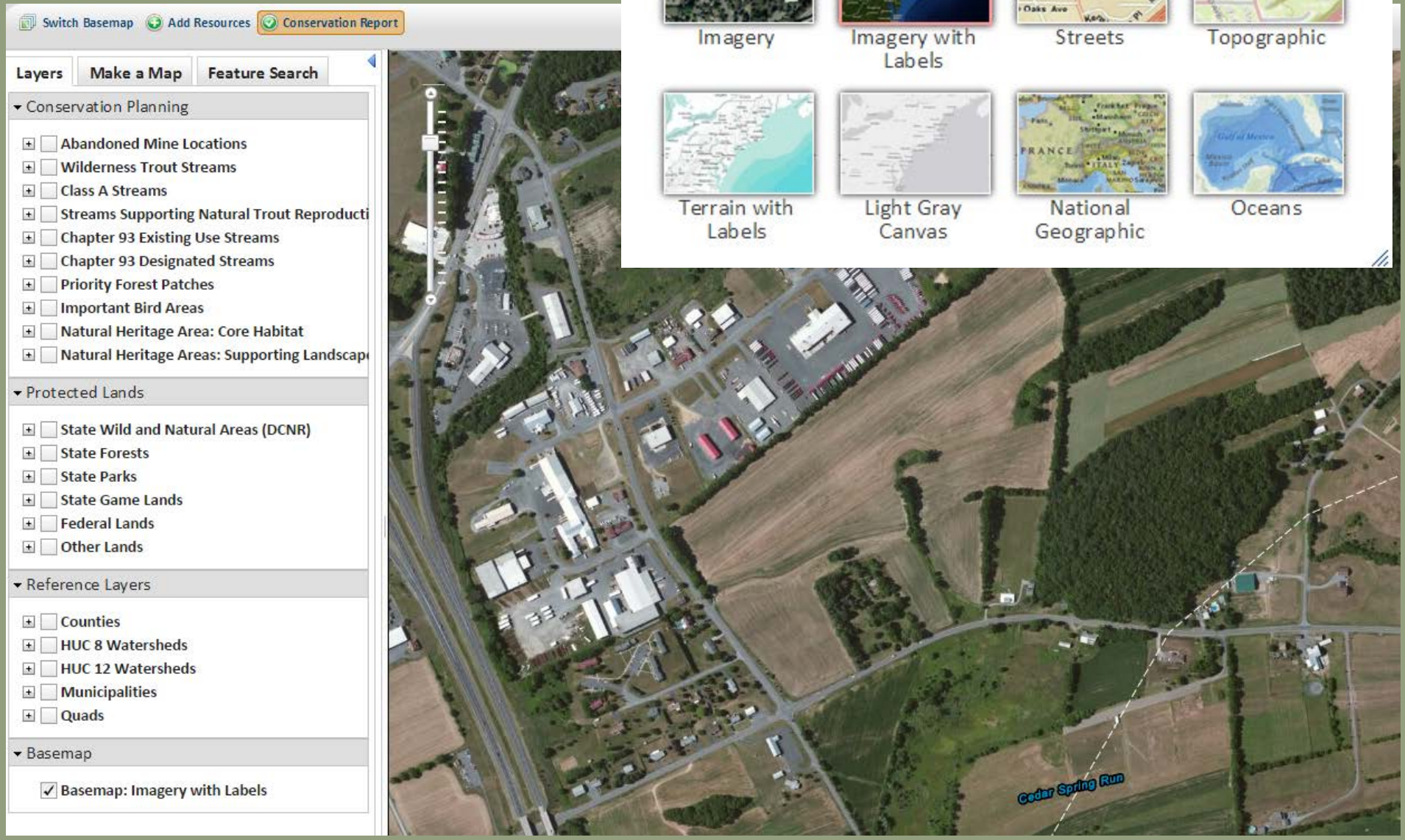
- View PA's conservation information for land-use and conservation planning
  - Anyone can view and create maps of conservation areas, statuses and values.
  - Access to Conservation Planning is open to all users
- Perform a PNDI Environmental Review and obtain a PNDI receipt
  - Perform online screenings for potential impacts to threatened, endangered, special concern species and resources.

Mapping Enhancements

Mapping Enhancements

Presque Isle State Park




Switch Basemap
Add Resources
Conservation Report
Layers
Make a Map
Feature Search
Conservation Planning
Abandoned Mine Locations
Wilderness Trout Streams
Class A Streams
Streams Supporting Natural Trout Reproducti
Chapter 93 Existing Use Streams
Chapter 93 Designated Streams
Priority Forest Patches
Important Bird Areas
Natural Heritage Area: Core Habitat
Natural Heritage Areas: Supporting Landscape
Protected Lands
State Wild and Natural Areas (DCNR)
State Forests
State Parks
State Game Lands
Federal Lands
Other Lands
Reference Layers
Counties
HUC 8 Watersheds
HUC 12 Watersheds
Municipalities
Quads
Basemap
Basemap: Imagery with Labels
Switch Basemap
Imagery
Imagery with Labels
Streets
Topographic
Terrain with Labels
Light Gray Canvas
National Geographic
Oceans
Cedar Spring Run

Conservation Planning

Conservation Planning

Purpose: Conservation Planning & Project Assessments

Open access: No login required

View Conservation Information (no PNDI info)

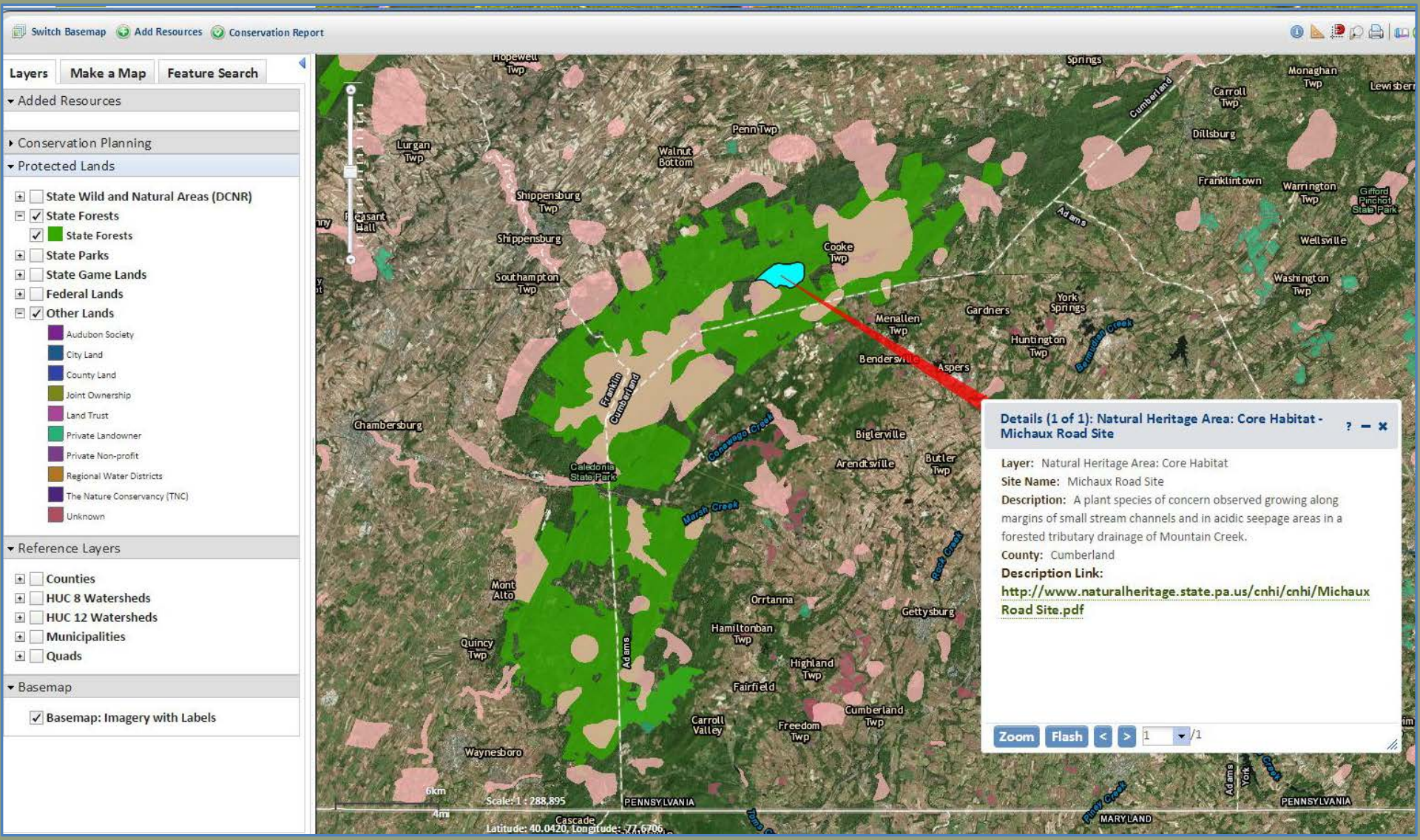
Landscape Level Assessments

Obtain Planning Reports

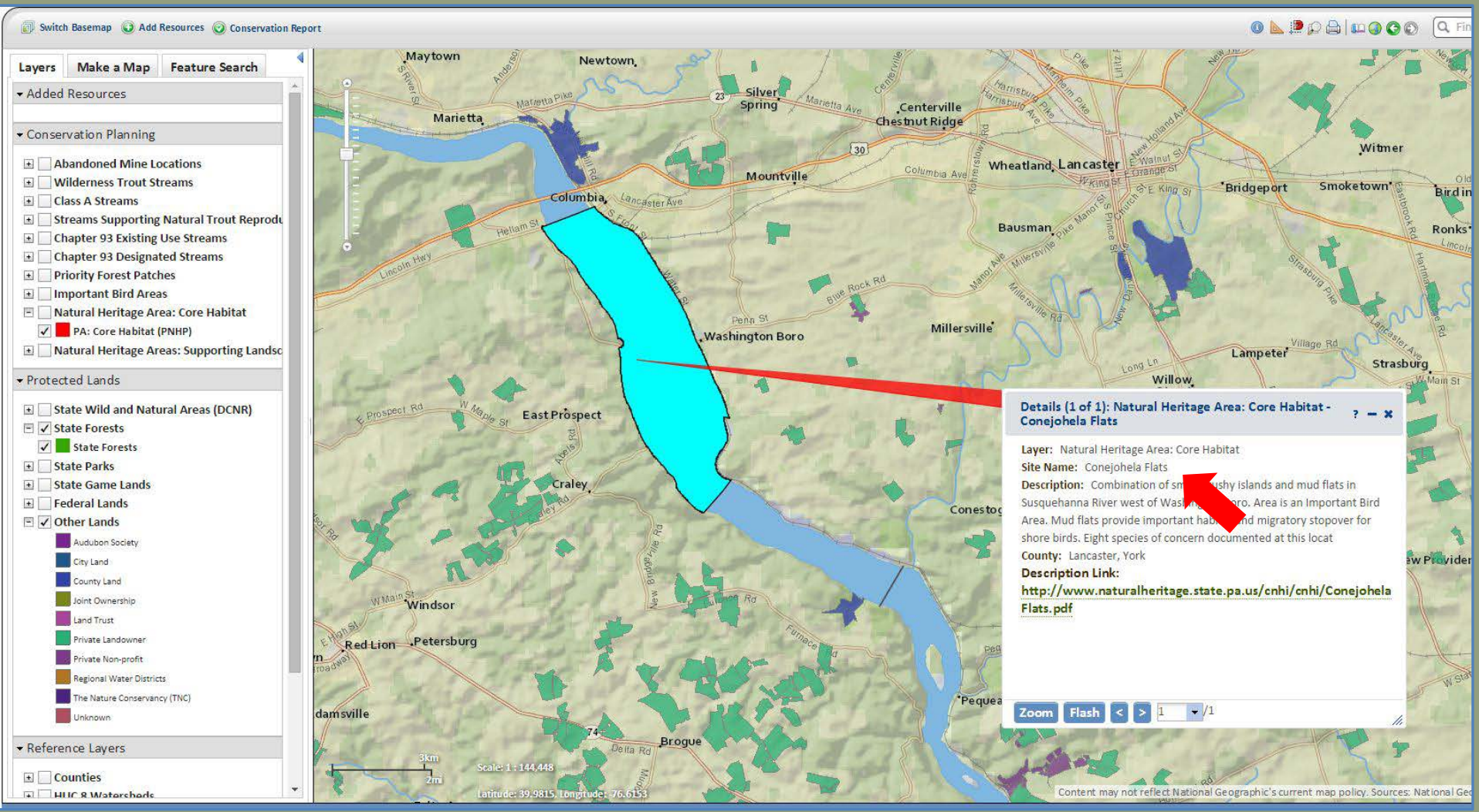
Choose from 11 Base maps

Add Your Own Data Layers

Visible Information



Access to Conservation Information



Access to CNAI Report

Natural Heritage Site Name	Description	Reference
Strack's Dam	Extensive wetland complex supports a species of concern. Reed canary grass and common reed threaten to dominate some areas of the wetland.	Link

Strack's Dam

A **species of concern**, not named at the request of the agency overseeing its protection, occurs in a wetland near the drained Myerstown Dam. This site now consists of a twenty-two acre wetland. This shallow wetland is currently being threatened by invasive plant species, including reed canary grass (*Phalaris arundinacea*) and common reed (*Phragmites australis*). A channelized stream runs through the eastern part of this site but most of the adjacent areas consist of wooded areas. Associated species include rice-cut grass (*Leersia oryzoides*), cattail (*Typha latifolia*), watercress (*Nasturtium officinale*), sweetflag (*Acorus calamus*), and various sedges (*Carex* spp.).

Conservation recommendations:
Monitor for changes in hydrology and control invasive species of plants.

Conservation Planning Report

Select area
Receive Conservation Report

Pennsylvania Department of Natural Resources
Conservation Planning Report

2/20/2015 03:55:44 PM
Presque Isle State Park

Presque Isle State Park

0 0.2 0.4 0.8 1.2 1.6 Miles

- Project Boundary
- Core Habitats
- Supporting Landscapes
- Important Bird Areas
- State Lands
- Chapter 93 Designated Use Streams

PENNSYLVANIA
Pittsburgh
Harrisburg

Pennsylvania Department of Natural Resources
Conservation Planning Report

2/20/2015 03:55:44 PM
Presque Isle State Park

Natural Heritage Areas

Natural Heritage Areas (NHAs) are sites that have been identified as critical habitat for species or natural communities of concern. This dataset is designed to identify, map and discuss areas that support species of concern, exemplary natural communities, and broad expanses of intact natural ecosystems that support components of Pennsylvania's native species biodiversity. These areas are prioritized based upon their ecological qualities and provided with recommendations regarding their management and protection. Most of the existing NHAs have been developed through PNHP's County Natural Heritage Inventories --systematic studies of the critical biological resources of a county.

Natural Heritage Site Name	Description	Reference
Presque Isle - Bay	As one of the best natural harbors along Lake Erie, Presque Isle Bay and its tributaries provide habitat for 15 species of concern in PA. Two state endangered fish, Iowa darter and Eastern sand darter, have refugia here.	View the CNHI report for more information
Presque Isle - Gull Point	This area is the only example of the Great Lakes beach-dune-sandplain complex in PA. Comprised of several dynamic lakeshore community types, the highly diverse Gull Point	View the CNHI report for more information
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Presque Isle - Gull Point	This area is the only example of the Great Lakes beach-dune-sandplain complex in PA. Comprised of several dynamic lakeshore community types, the highly diverse Gull Point supports at least 53 species of concern in PA. This	View the CNHI report for more information
Presque Isle - Peninsula	Diverse natural communities on the Peninsula include shoreline, sand dunes, sandplain and new ponds, marshes and old ponds, and several forest types. This site supports more than 70 species of concern, more than any other NHA in the state.	View the CNHI report for more information

State Lands

These include lands managed by the Department of Natural Resources (DCNR) Bureau of Forestry (BOF) for long-term forest health and native plant conservation; Pennsylvania Game Commission (PGC) for hunting, trapping and fishing; and DCNR Bureau of State Parks (BSP) for healthful outdoor recreation and environmental education.

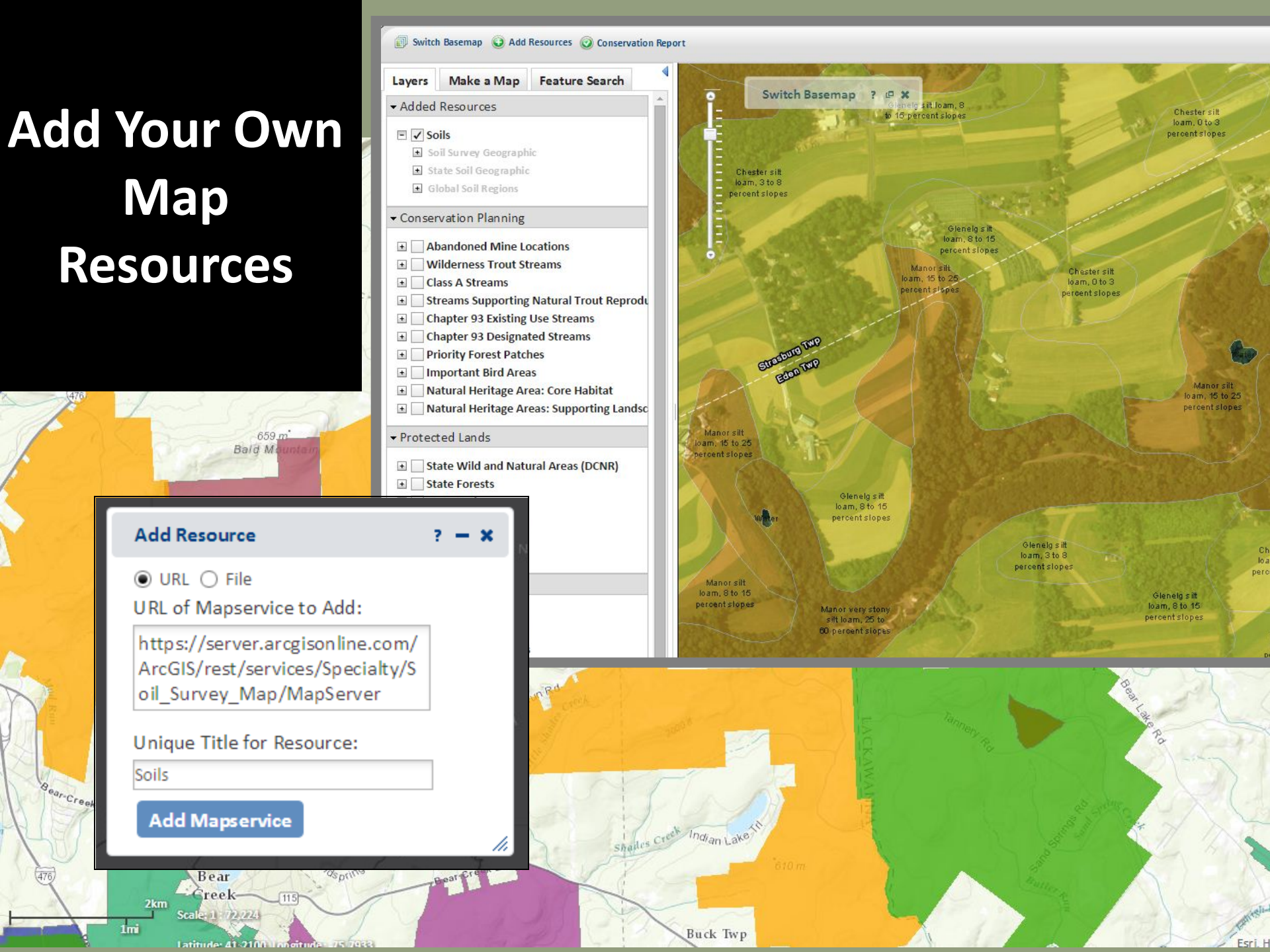
Name	Wild Area Type	Wild Area Name	Manager	Total Acres
Presque Isle State Park	None	NA	BSP	2017.85

Important Bird Areas (IBAs)

These are areas recognized as being globally important habitat for the conservation of bird populations. Currently there are about 10,000 IBAs worldwide. The program was developed and sites are identified by BirdLife International.

IBA Site Number	Name	Reference
1	Presque Isle State Park	Link

Add Your Own Map Resources



Conservation Planning

- Municipal and County planning
- Landscape-level project planning
- Grant planning
- Conservation assessments
- Site assessments
- Conservation planning layers

PNDI Environmental Review

PNDI Environmental Review

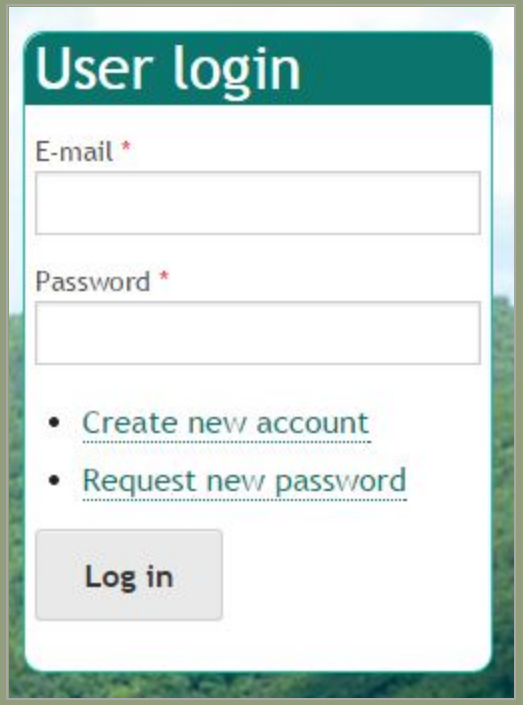
Purpose: Project-Specific Screening

Register, Data Sharing & Login Required

Fee Access for PNDI Screening & PNDI Receipt

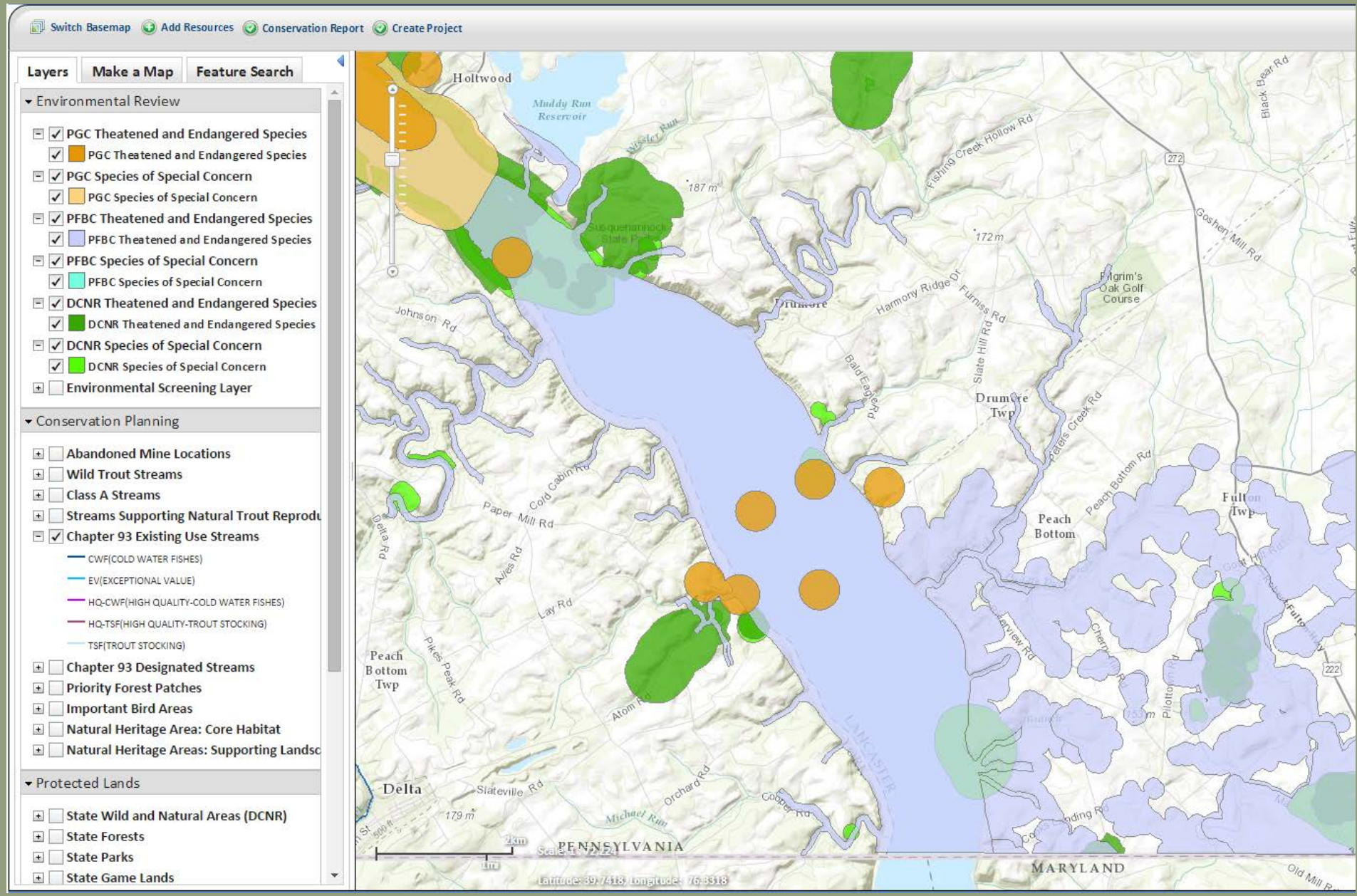
View PNDI Species Habitat Info & Conservation Layers

Submit Project Materials Via Tool

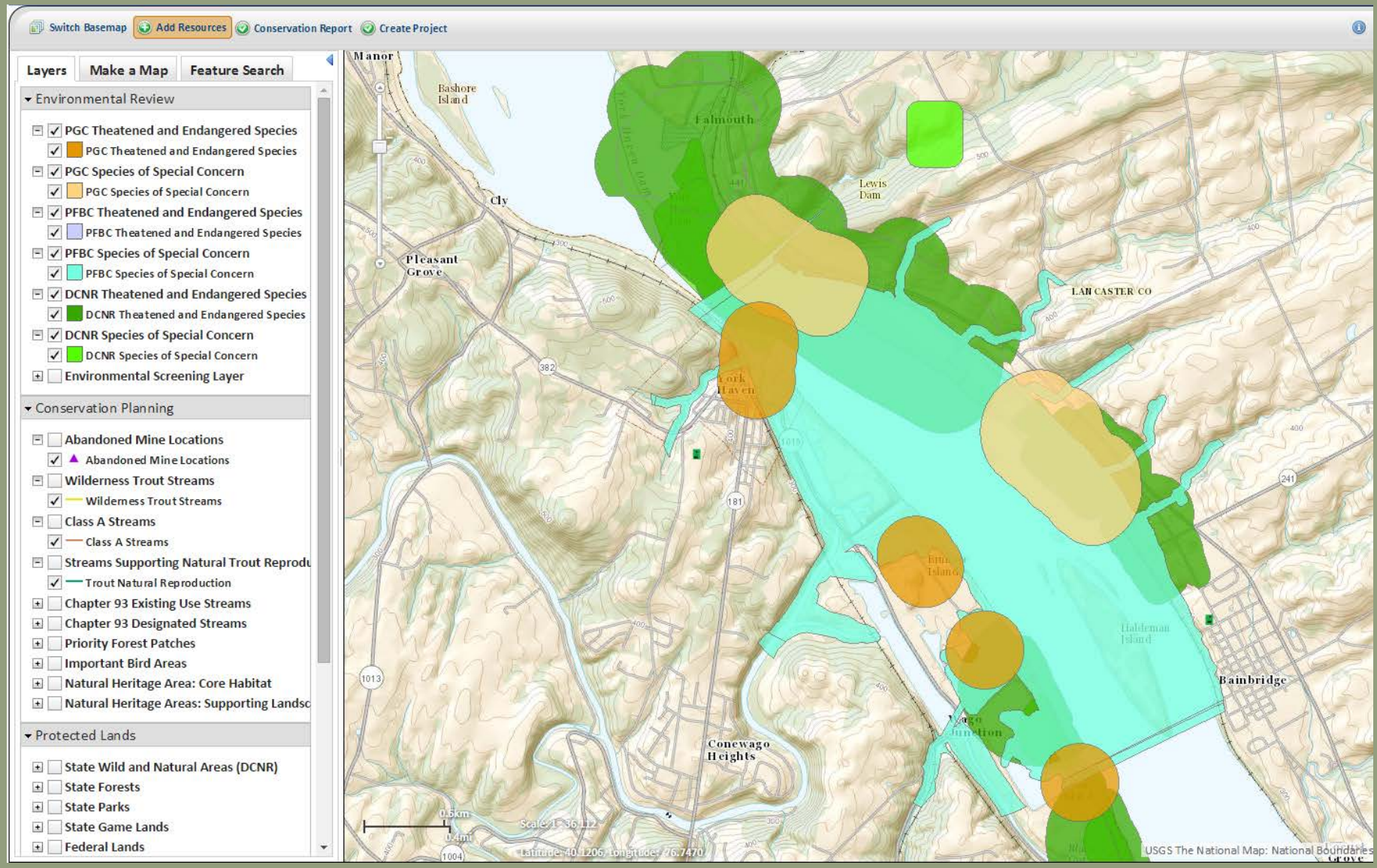

User login
E-mail *
Password *
Create new account
Request new password
Log in

PNHP
Pennsylvania Natural Heritage Program
Home
Map
Terms & Conditions
Contact Us
Help
Pennsylvania Conservation Explorer
Conservation Planning and PNDI Environmental Review
Conservation Planning
Welcome to Pennsylvania Conservation Explorer—for conservation planning and PNDI environmental reviews. The web-mapping tool allows anyone to perform online searches for potential impacts to threatened, endangered, special concern species and natural heritage resources.
For conservation planning, users do not need to register or log in.
Environmental Review
Anyone can view and create maps of natural heritage areas by clicking the Map tab. You will need create an account to view environmental review polygons and generate a PNDI receipt for pre-permitting. You must be a registered user to view known locations of threatened, endangered, and special concern species and/or submit a project site for review. Note: Your project may require avoidance measures, conservation measures, or agency-specific response(s).
Pennsylvania Natural Heritage Program
To register, click on Create new account.
News & Updates
Subscribe to Wild Heritage News
The latest edition of PNHP Quarterly Newsletter is available. This issue includes articles on Beaver and Chester Natural Heritage County updates and the Natural Communities and Heritage of Raccoon Creek State Park. View the issue here.
User login
E-mail *
Password *
Create new account
Request new password
Log in

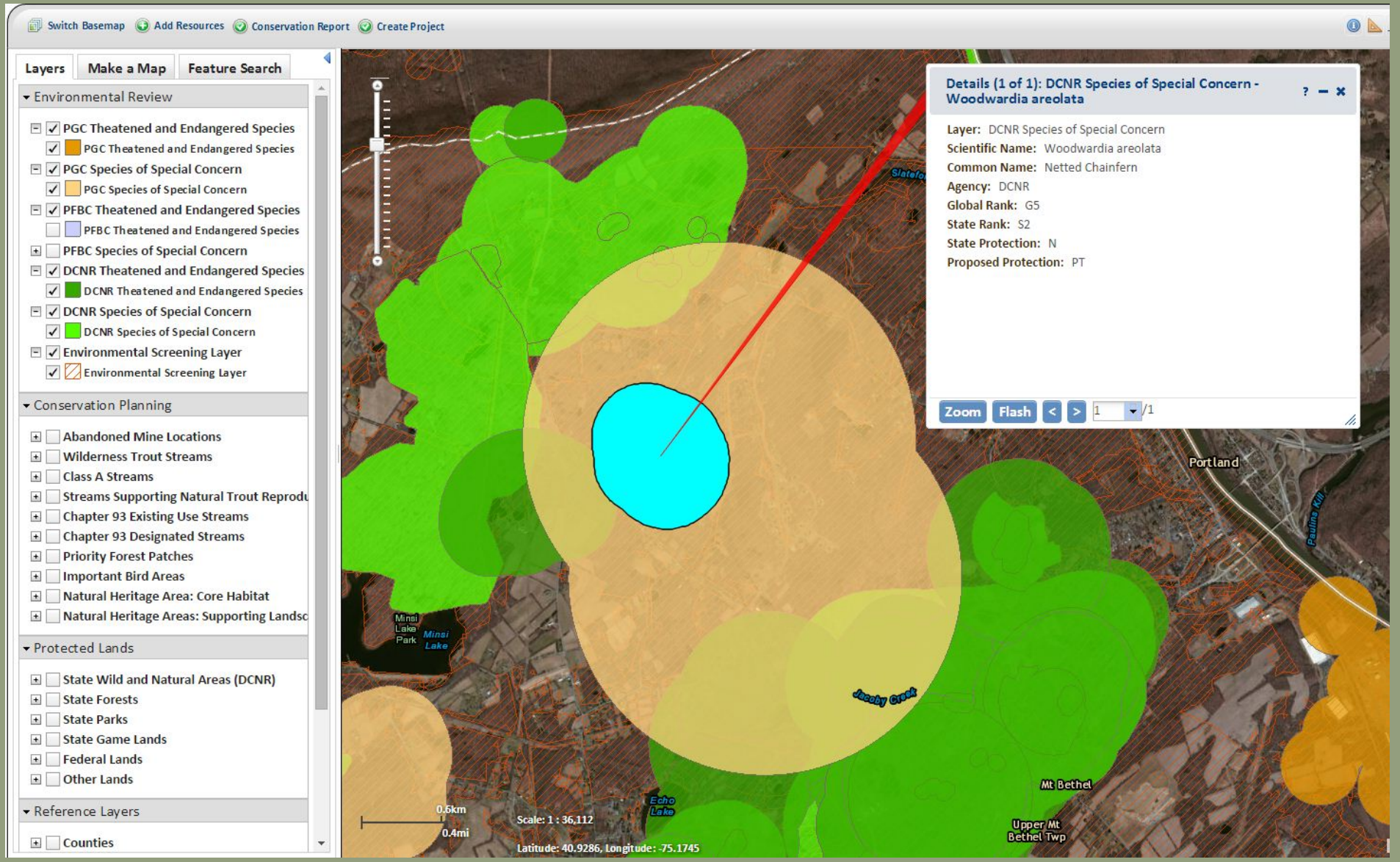
Environmental Review—Visible Polygons

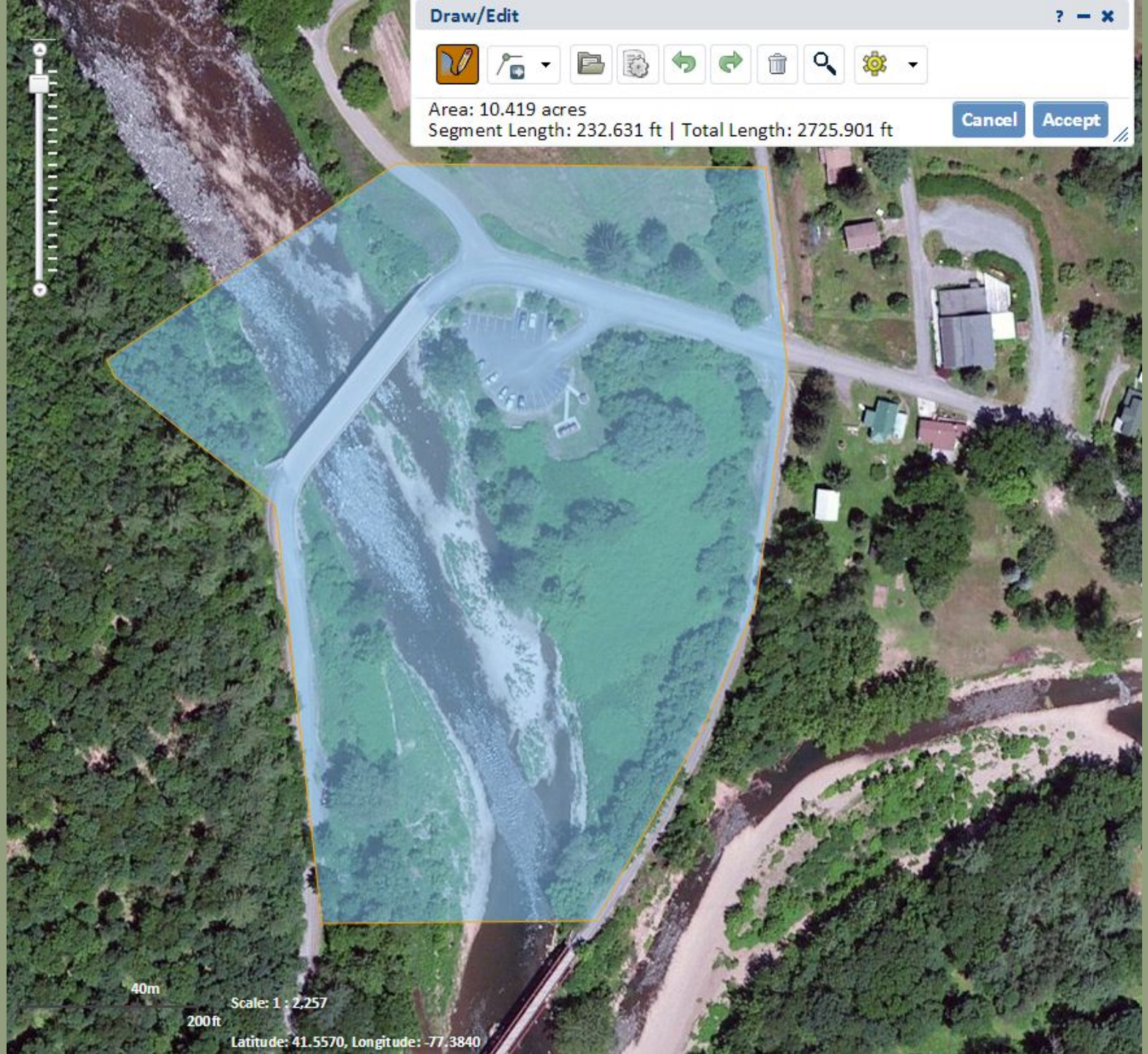


Environmental Review



Environmental Review
Visible Polygons & Non-T&E Names

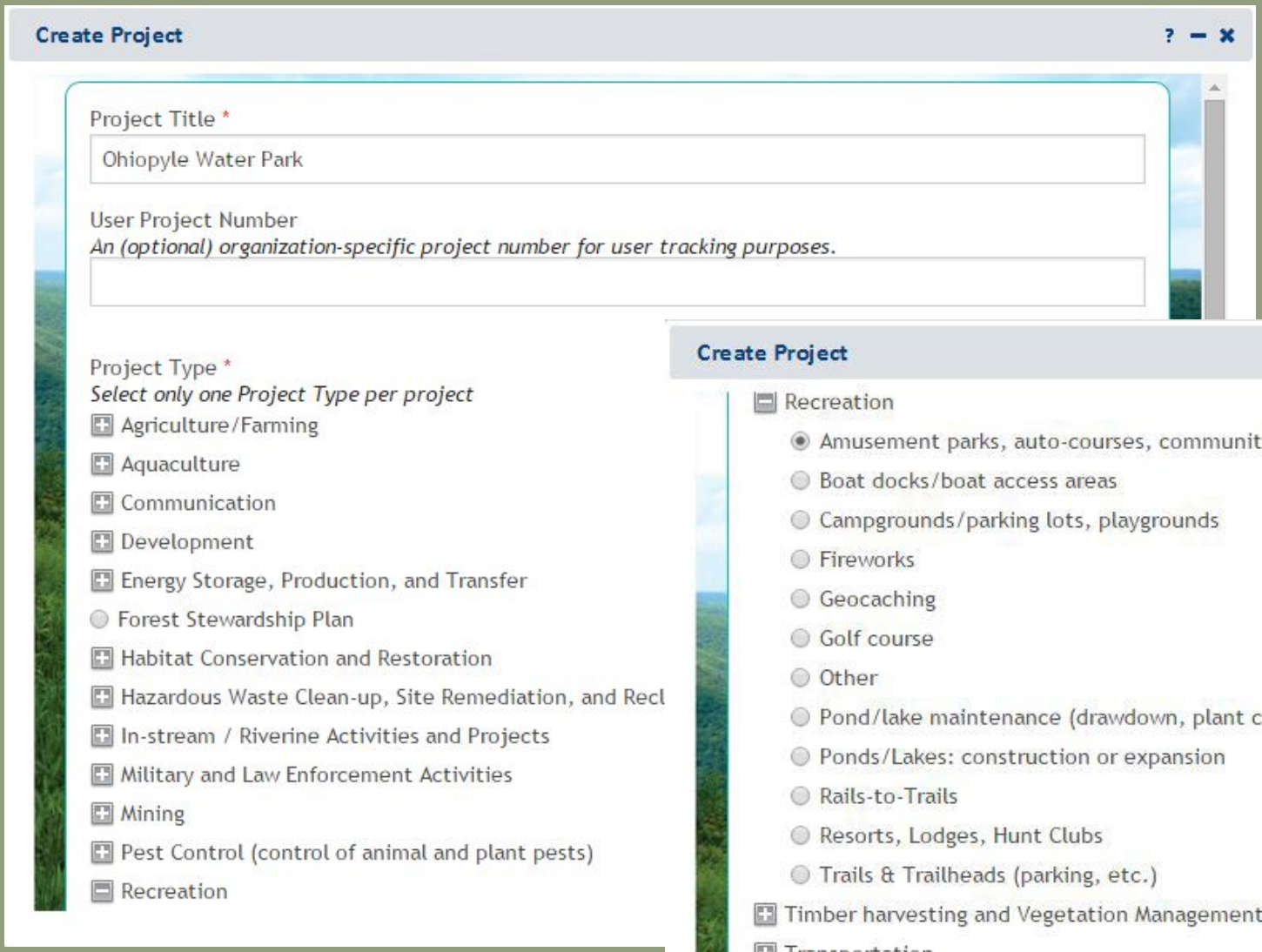


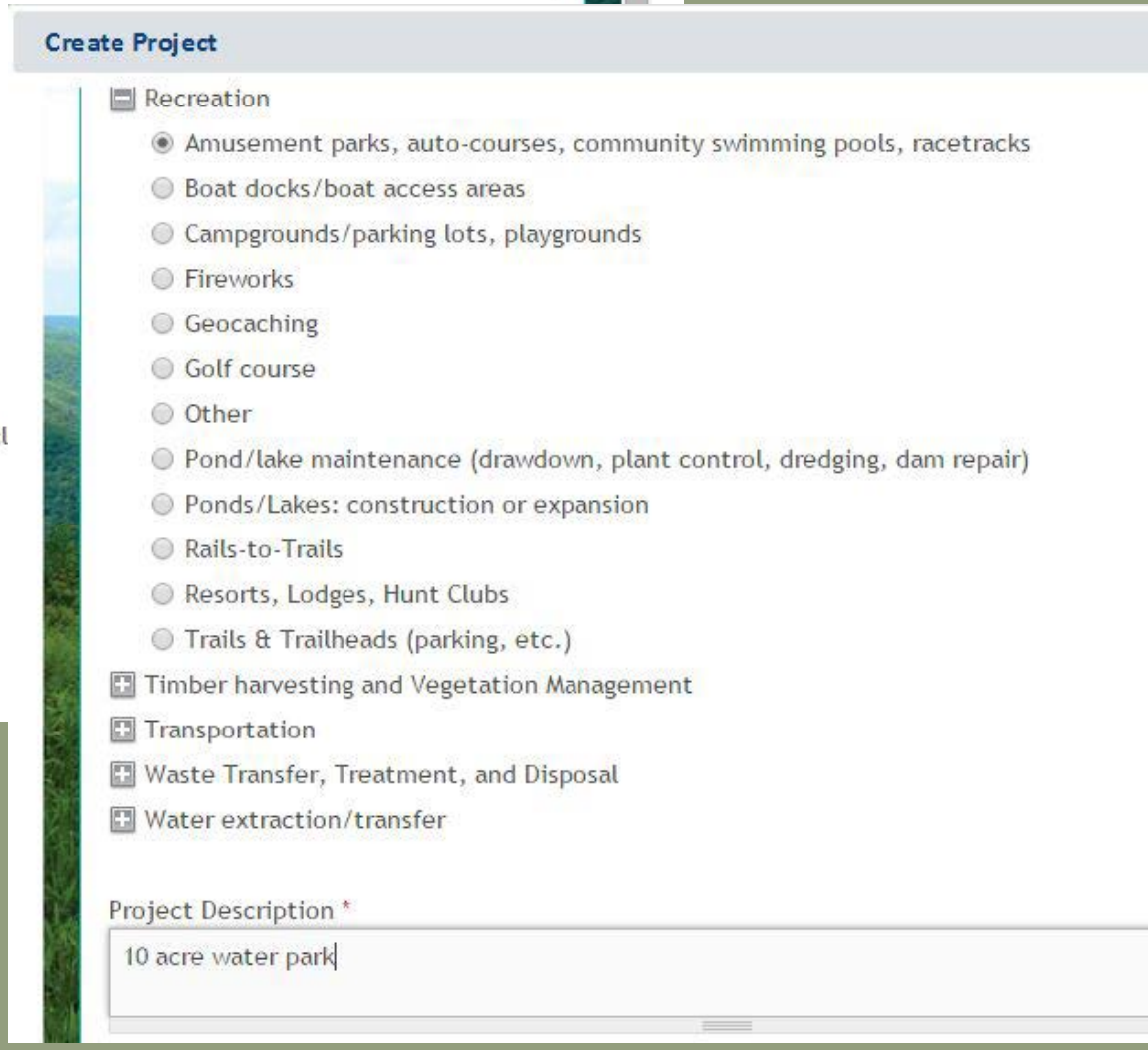

Draw/Edit
Area: 10.419 acres
Segment Length: 232.631 ft | Total Length: 2725.901 ft
Cancel
Accept
40m
200 ft
Scale: 1 : 2,257
Latitude: 41.5570, Longitude: -77.3840

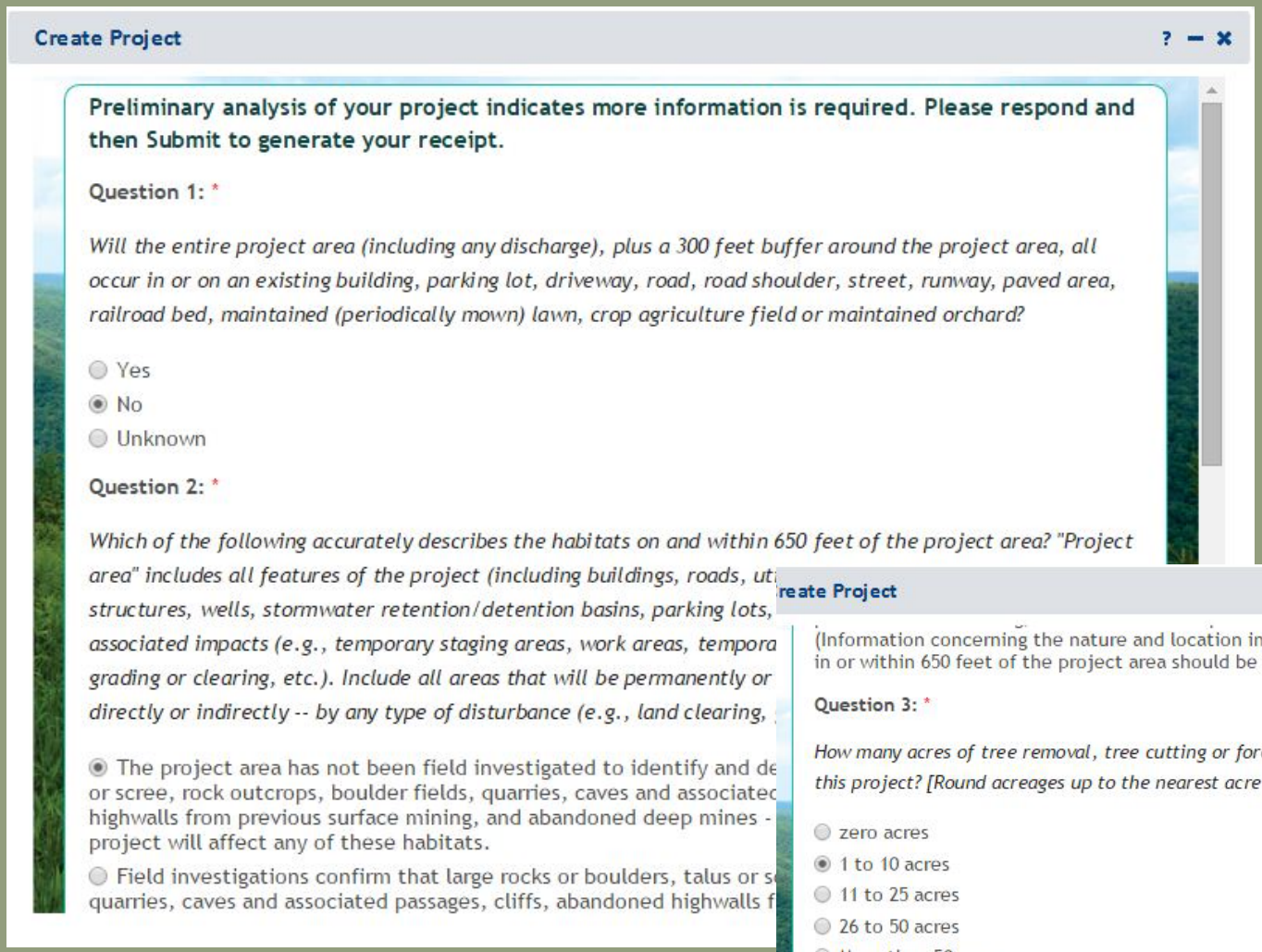
Proposed PNDI Receipt Fee

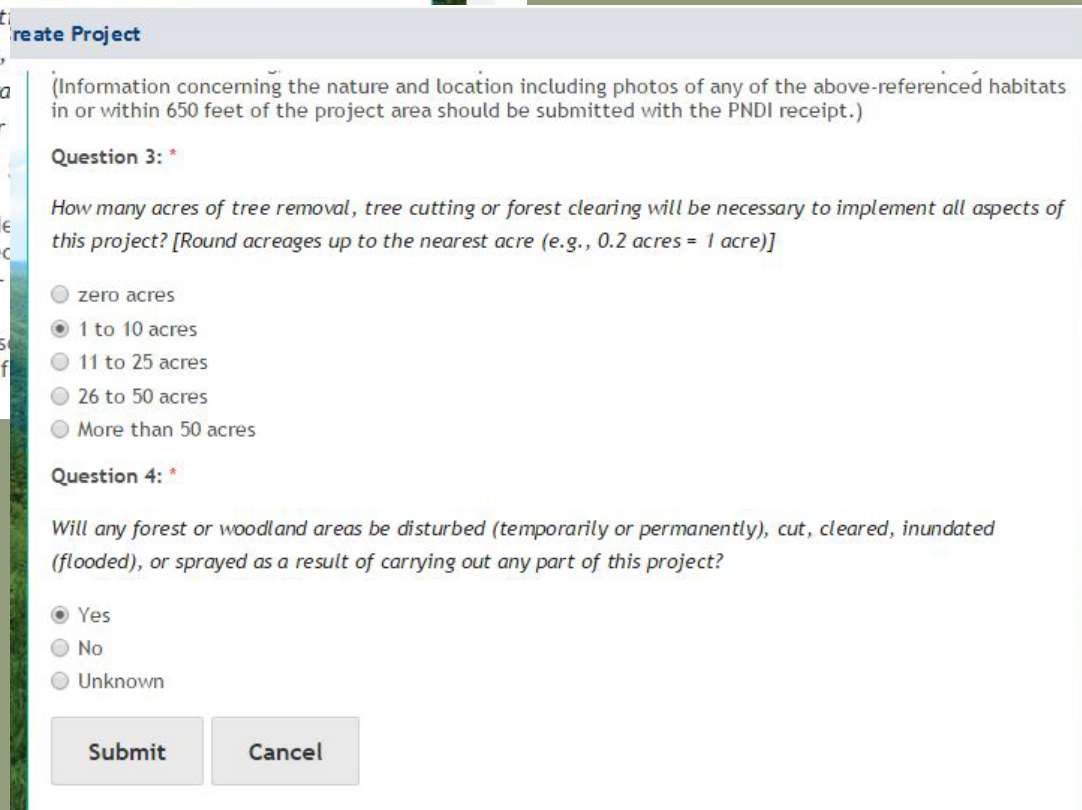
Proposed PNDI Fee

- To recoup administrative costs of tool and data mgmt
  - Ensure sustainability of PNDI tool and information
- $40/PNDI Receipt
- No cost option to users—obtain review directly from agencies, rather than tool
- T&E Names will be displayed on PNDI Receipt


Create Project
Project Title *
Ohiopyle Water Park
User Project Number
An (optional) organization-specific project number for user tracking purposes.
Project Type *
Select only one Project Type per project
Agriculture/Farming
Aquaculture
Communication
Development
Energy Storage, Production, and Transfer
Forest Stewardship Plan
Habitat Conservation and Restoration
Hazardous Waste Clean-up, Site Remediation, and Recl
In-stream / Riverine Activities and Projects
Military and Law Enforcement Activities
Mining
Pest Control (control of animal and plant pests)
Recreation


Create Project
Recreation
Amusement parks, auto-courses, community swimming pools, racetracks
Boat docks/boat access areas
Campgrounds/parking lots, playgrounds
Fireworks
Geocaching
Golf course
Other
Pond/lake maintenance (drawdown, plant control, dredging, dam repair)
Ponds/Lakes: construction or expansion
Rails-to-Trails
Resorts, Lodges, Hunt Clubs
Trails & Trailheads (parking, etc.)
Timber harvesting and Vegetation Management
Transportation
Waste Transfer, Treatment, and Disposal
Water extraction/transfer
Project Description *
10 acre water park


Create Project
? – ✖
Preliminary analysis of your project indicates more information is required. Please respond and then Submit to generate your receipt.
Question 1: *
Will the entire project area (including any discharge), plus a 300 feet buffer around the project area, all occur in or on an existing building, parking lot, driveway, road, road shoulder, street, runway, paved area, railroad bed, maintained (periodically mown) lawn, crop agriculture field or maintained orchard?
Yes
No
Unknown
Question 2: *
Which of the following accurately describes the habitats on and within 650 feet of the project area? "Project area" includes all features of the project (including buildings, roads, uti
structures, wells, stormwater retention/detention basins, parking lots,
associated impacts (e.g., temporary staging areas, work areas, tempora
grading or clearing, etc.). Include all areas that will be permanently or
directly or indirectly -- by any type of disturbance (e.g., land clearing,
The project area has not been field investigated to identify and de
or scree, rock outcrops, boulder fields, quarries, caves and associated
highwalls from previous surface mining, and abandoned deep mines -
project will affect any of these habitats.
Field investigations confirm that large rocks or boulders, talus or s
quarries, caves and associated passages, cliffs, abandoned highwalls f


reate Project
(Information concerning the nature and location including photos of any of the above-referenced habitats in or within 650 feet of the project area should be submitted with the PNDI receipt.)
Question 3: *
How many acres of tree removal, tree cutting or forest clearing will be necessary to implement all aspects of this project? [Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre)]
zero acres
1 to 10 acres
11 to 25 acres
26 to 50 acres
More than 50 acres
Question 4: *
Will any forest or woodland areas be disturbed (temporarily or permanently), cut, cleared, inundated (flooded), or sprayed as a result of carrying out any part of this project?
Yes
No
Unknown
Submit
Cancel

Project Receipt

Summary results of the PNDI screening are displayed in the receipt.

Pennsylvania Department of Natural Resources
PNDI Receipt: project_report_test_project_2564_3663.pdf

Project Search ID: PNDI-109

1. PROJECT INFORMATION

Project Name: **Test Project**
Date of Review: **4/1/2015 10:02:50 AM**
Project Category: **Energy Storage, Production, and Transfer, Energy Transfer, Pipeline (e.g., gas, oil) -- NEW (construction of new line in a new location)**
Project Area: **159.43 acres**
County(s): **Lancaster**
Township/Municipality(s): **FULTON**
ZIP Code: **17563**
Quadrangle Name(s): **WAKEFIELD**
Watersheds HUC 8: **Lower Susquehanna**
Watersheds HUC 12: **Conowingo Creek; Fishing Creek-Susquehanna River**
Decimal Degrees: **39.756495 N, -76.227861 W**
Degrees Minutes Seconds: **39° 45' 23.3830" N, 76° 13' 40.2990" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	**Potential Impact**	**FURTHER REVIEW IS REQUIRED, See Agency Response**
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	**Potential Impact**	**FURTHER REVIEW IS REQUIRED, See Agency Response**
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

PA Fish and Boat Commission
RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Percina bimaculata	Chesapeake Logperch	Threatened
Sensitive Species**		Endangered

U.S. Fish and Wildlife Service
RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

****Names of sensitive species hidden**

Project Upload

Upload Maps and Supporting Documents

- Users can upload project documents if there is a potential impact
- User to have a shorter project review timeline
- Agencies would access info from site for review

Summary of Enhancements

- **Administrative functions**
  - Improved ability to make tool changes, upgrades and fixes
- **Conservation Planning**
  - Clicking conservation info on/off
  - Conservation Reports
- **Visual Species Habitat Info**
  - Public: see conservation information for planning
  - Environmental Review: 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

Next Steps

- Obtain feedback from users
- November 2015: Roll out
- Trainings for users throughout 2015-2016