

Lancaster County Natural Heritage Inventory - Update 2008



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PA Natural Heritage Program, Western Pennsylvania Conservancy



Pennsylvania Natural Heritage Program

A partnership between:



Various academic researchers (Morris Arboretum, Carnegie Museum, Academy of Natural Sciences and others)

Rare species are susceptible to unfortunate events and poor planning.



Euphorbia purpurea

Photo source: R. Harrison Wiegand



Arethusa bulbosa

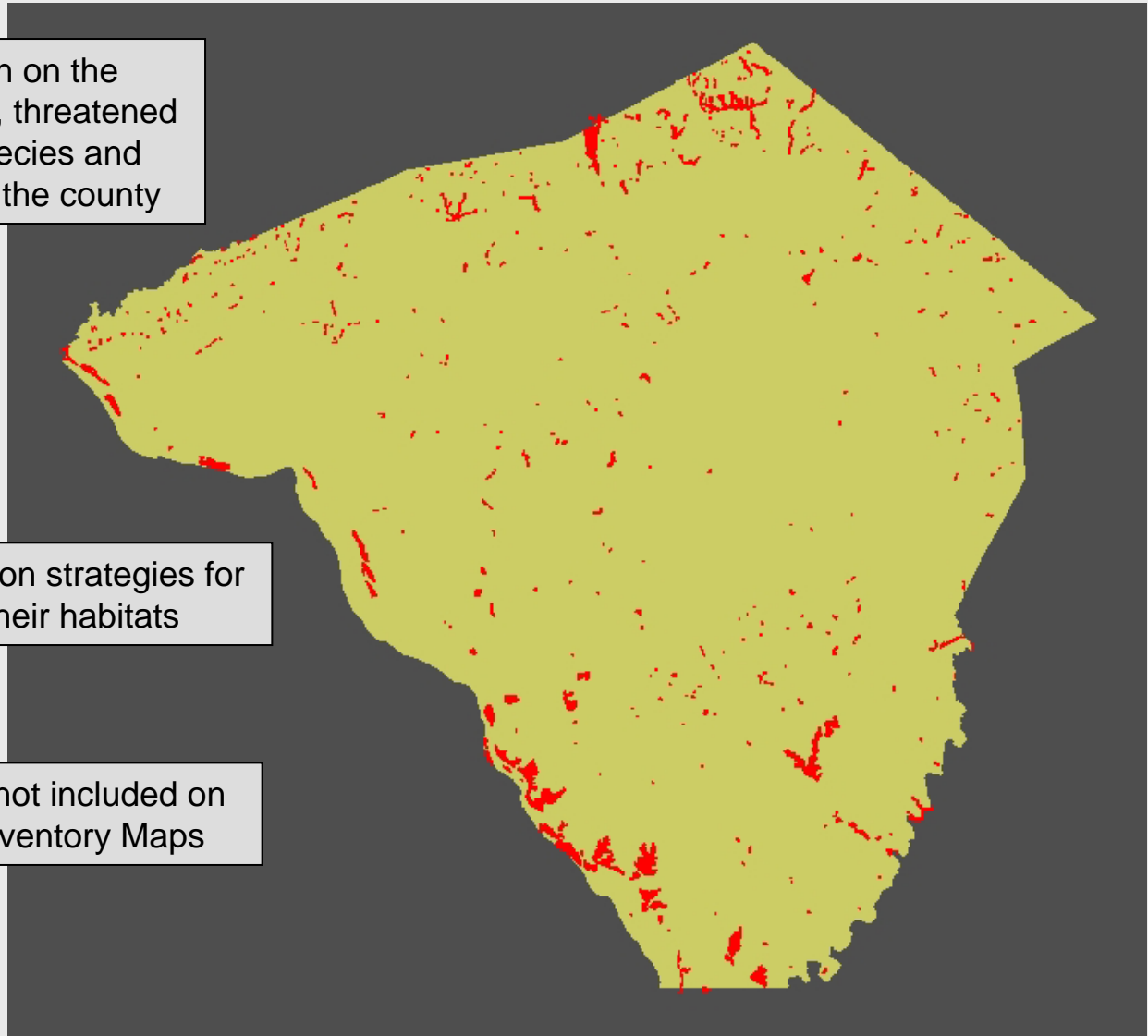
Photo source: PNHP

Original Lancaster County Natural Areas Inventory 1990

Provided information on the occurrences of rare, threatened and endangered species and their habitats within the county

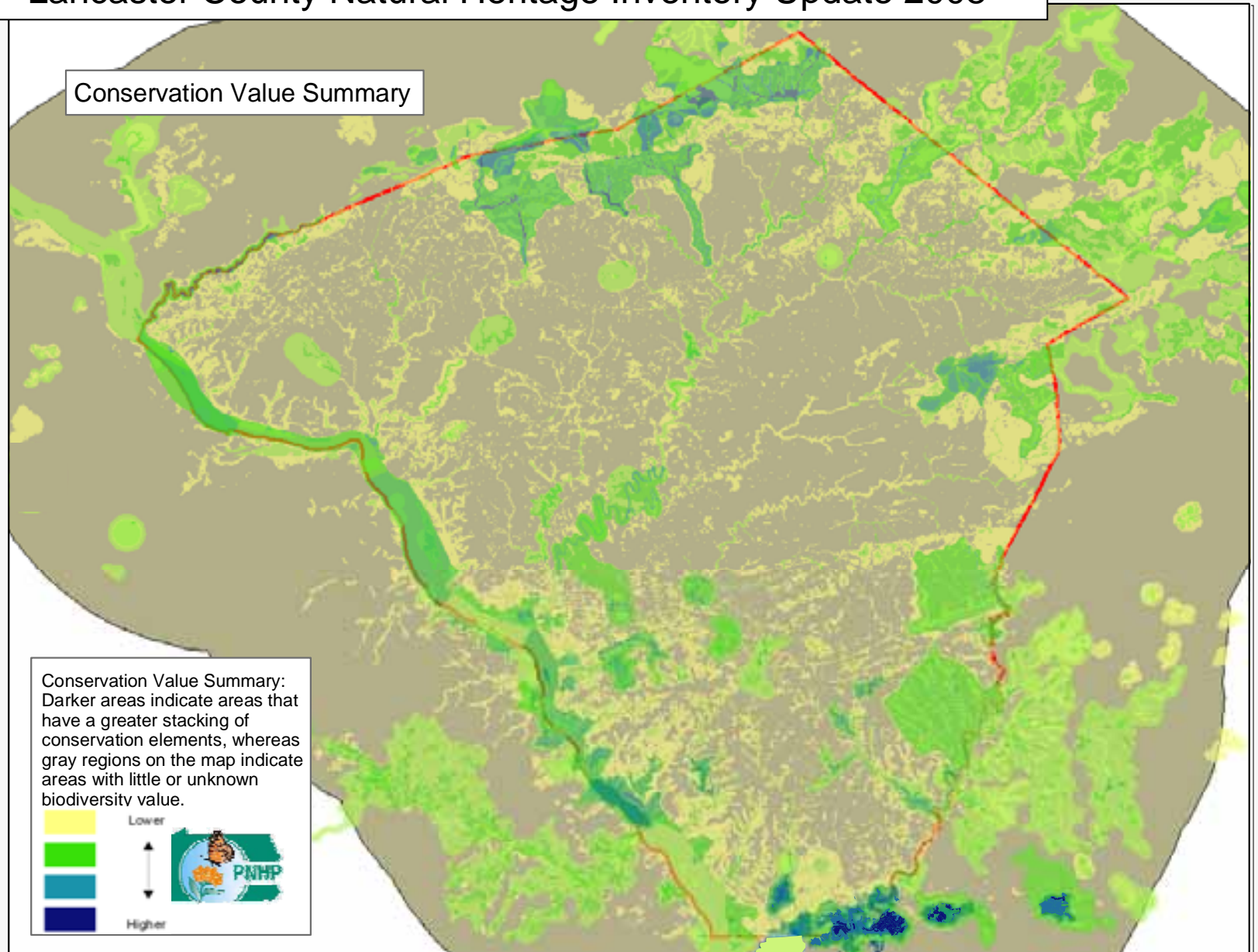
Provided conservation strategies for these species and their habitats

Identified wetlands not included on National Wetland Inventory Maps

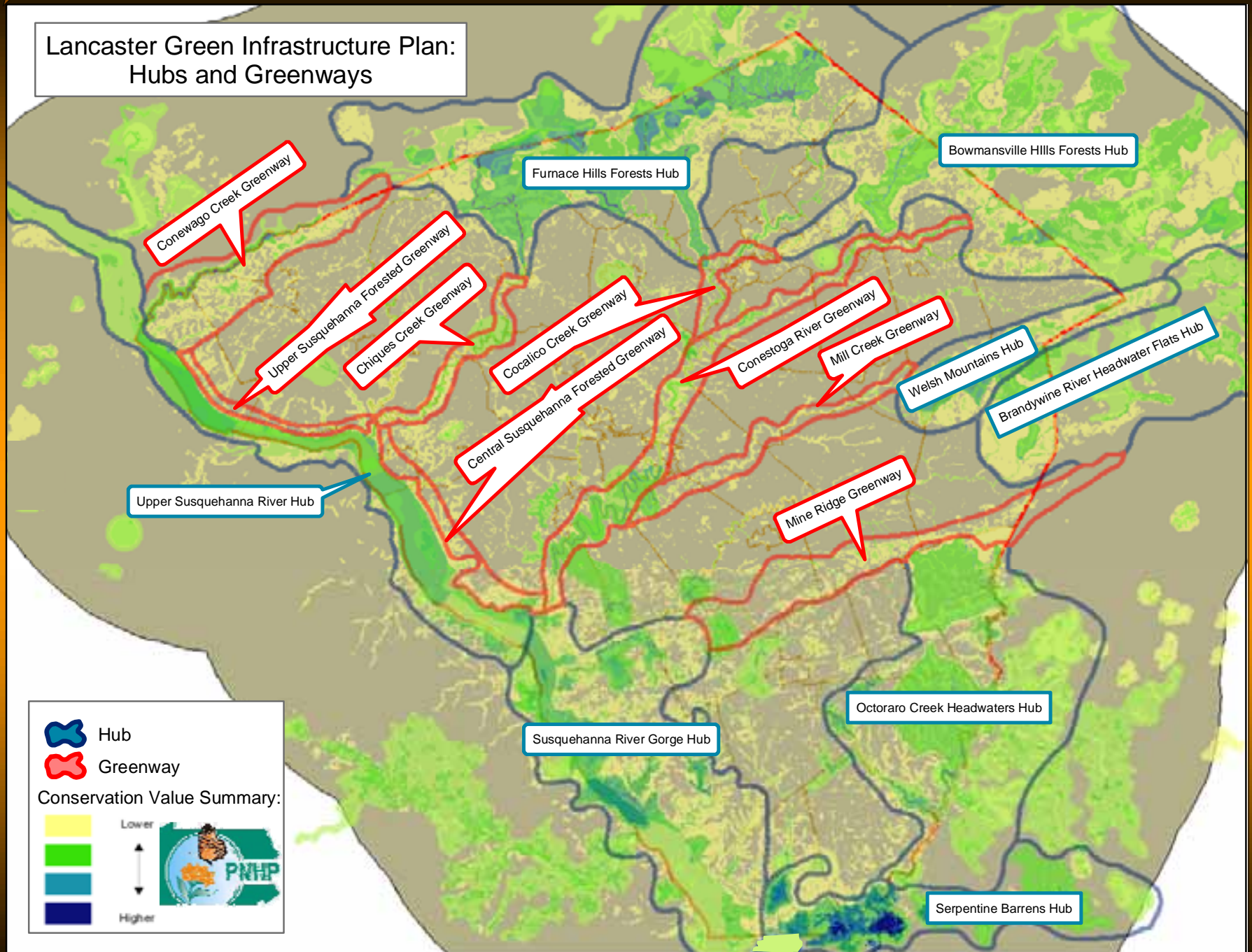


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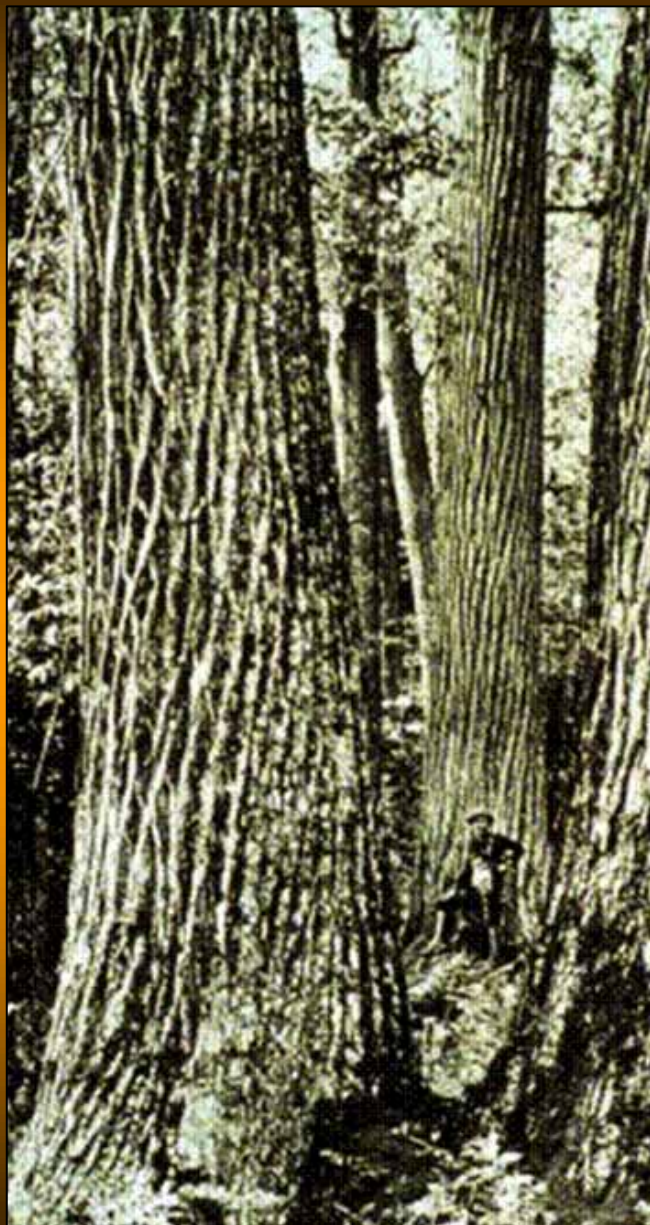
Conservation Value Summary



Lancaster Green Infrastructure Plan: Hubs and Greenways







John Bartram: traveling up the Susquehanna River in 1743, found forests so thick "it seems almost as if the sun had never shown on the ground since the creation."

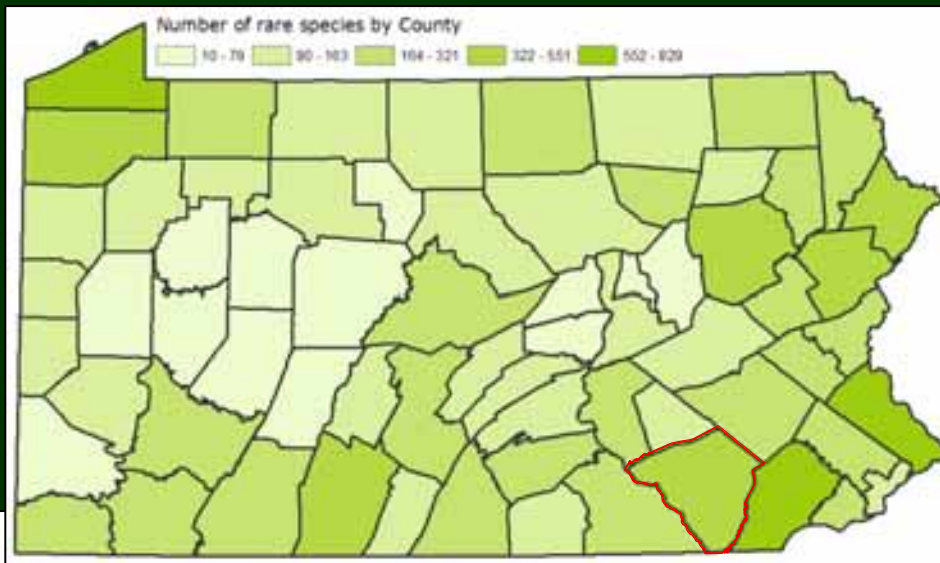


Geographic Inventory to identify, locate and evaluate exemplary natural communities and species of special concern

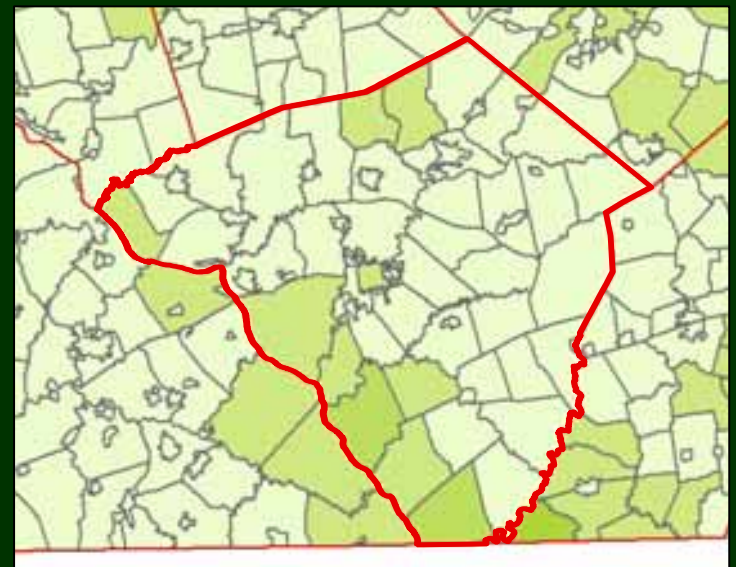
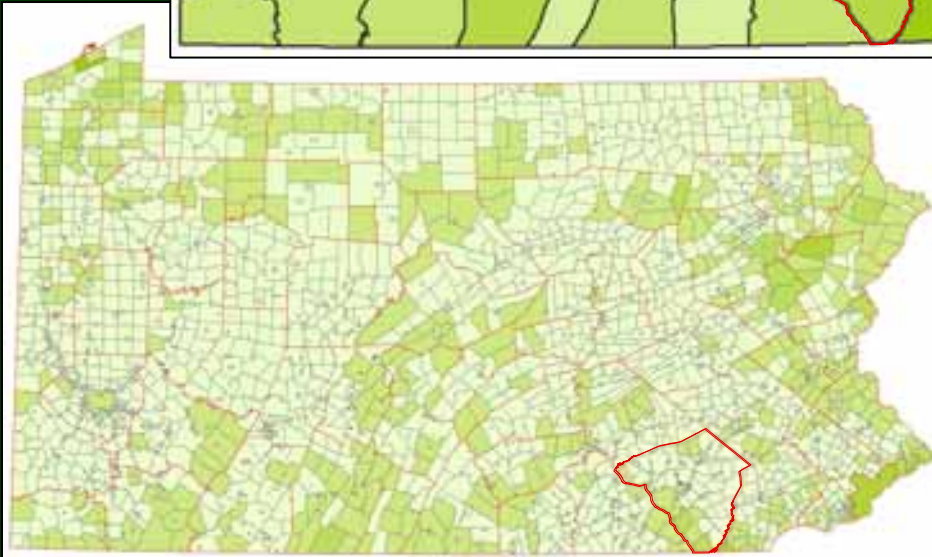


Reed Run, Lancaster County

Species of Concern in Lancaster County



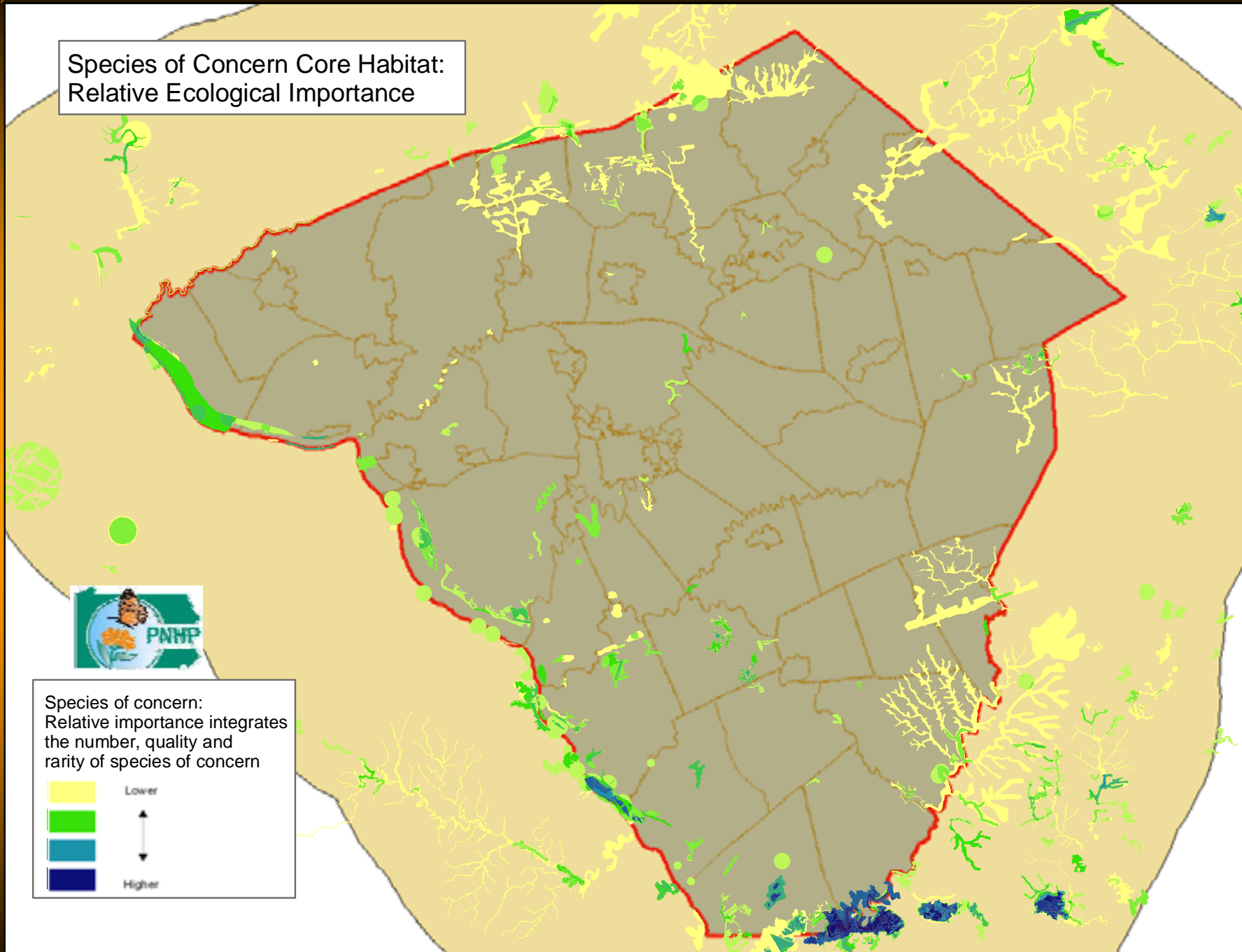
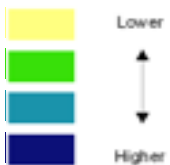
9 Birds
4 Reptiles
5 Mussels
42 Insects
73 Plants
5 Natural Communities
138 - Total




Species of Concern Core Habitat:
Relative Ecological Importance



Species of concern:
Relative importance integrates
the number, quality and
rarity of species of concern





What about all the other plants and animals?!!!!

Other factors that went into the ecological assessment of the county:

Forest blocks

Interior forests

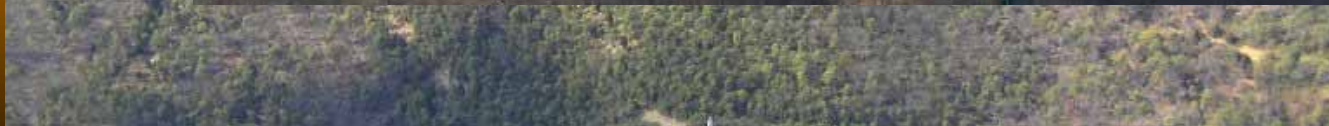
Natural Communities

Riparian corridors

Floodplains

Steep slopes

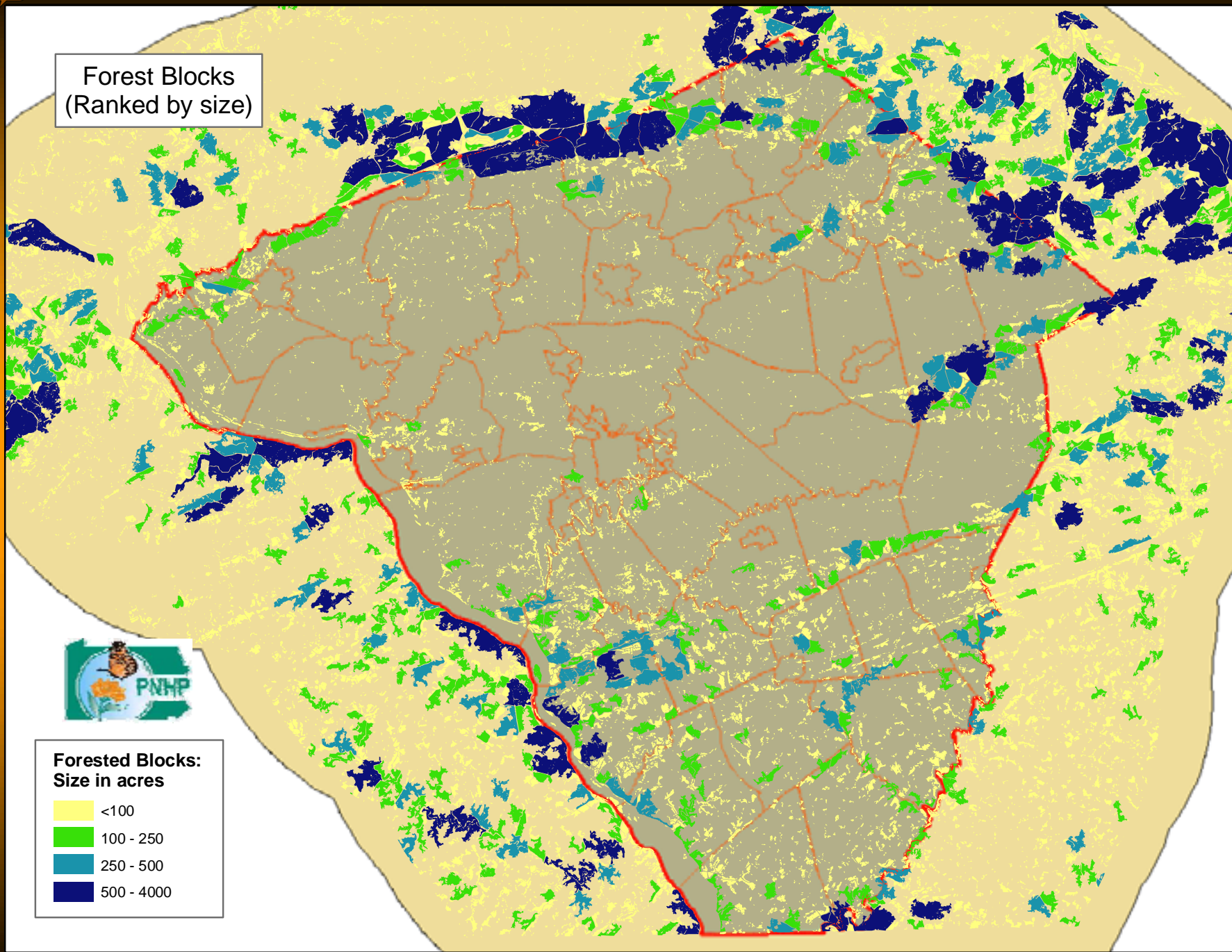
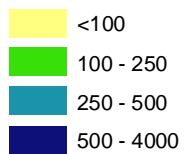
Important Bird Areas / Important Mammal Areas



Forest Blocks
(Ranked by size)



**Forested Blocks:
Size in acres**



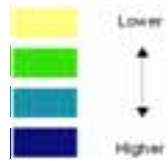
Edge effect and invasive species



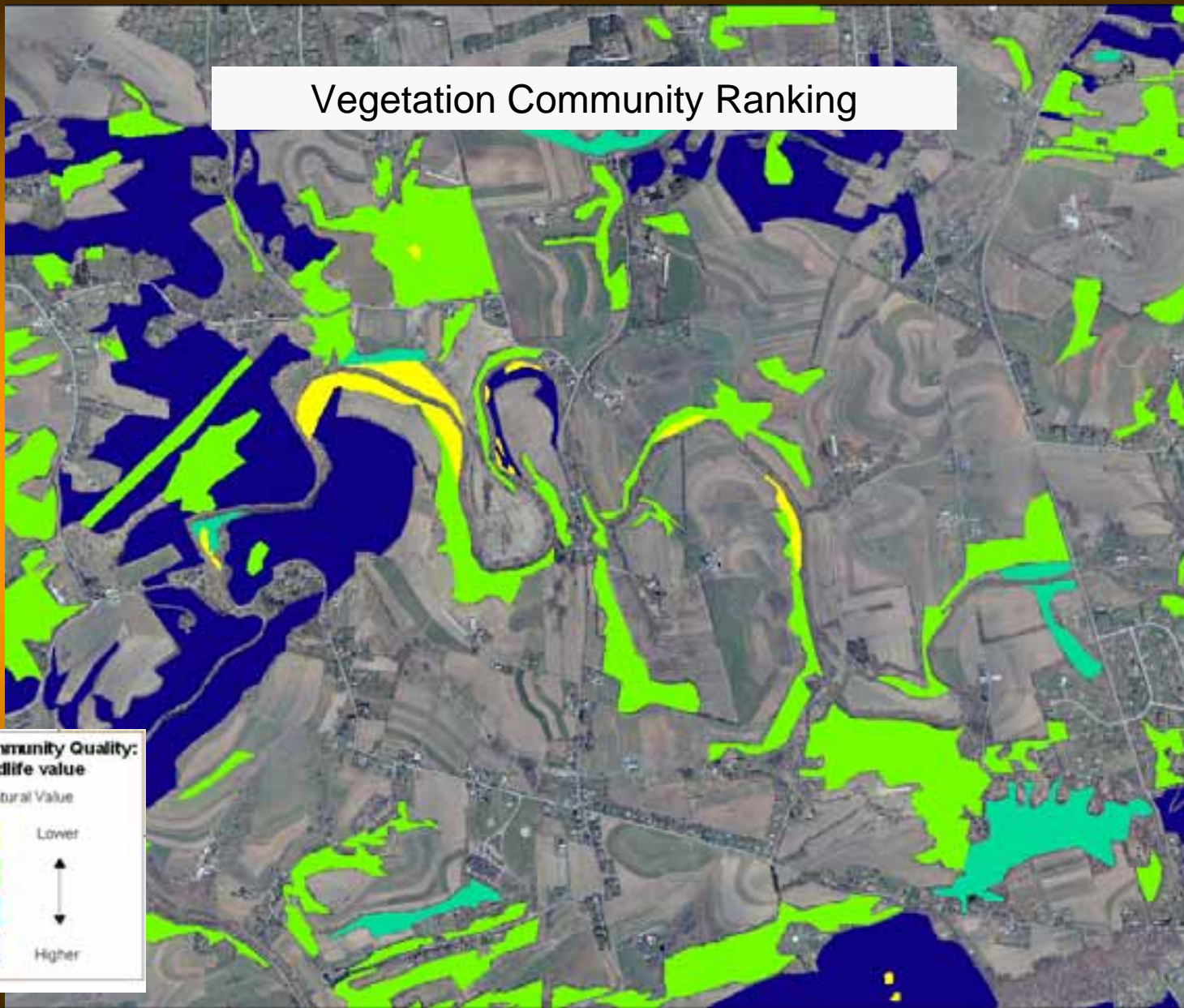
Interior Forest > 5 Acres



Interior forest - Relative value:
Size (acres) x Interior to perimeter ratio



Vegetation Community Ranking

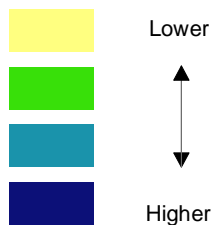


Natural Communities

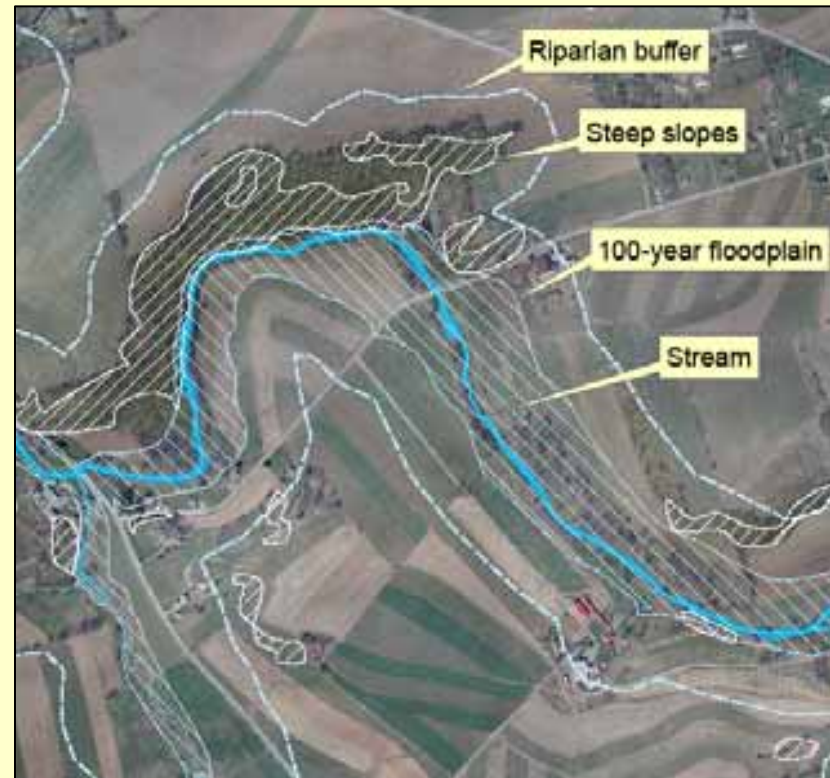
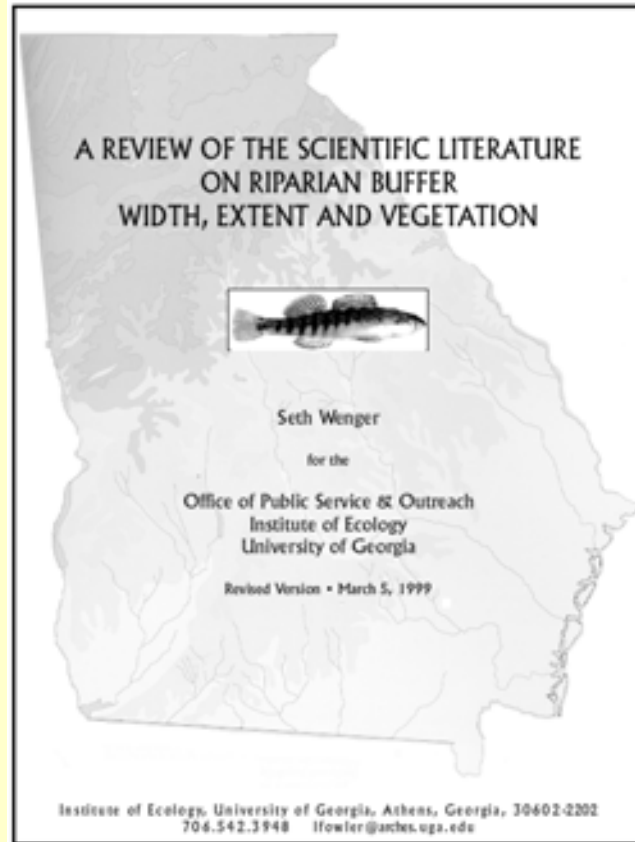


Natural Community Quality: Relative wildlife value

Potential Natural Value



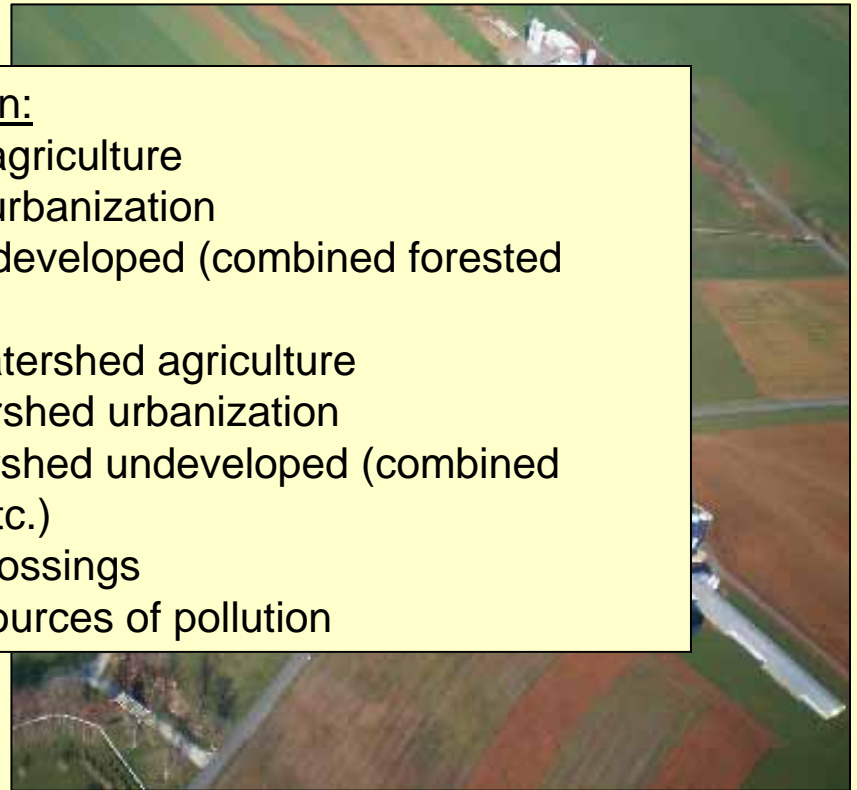
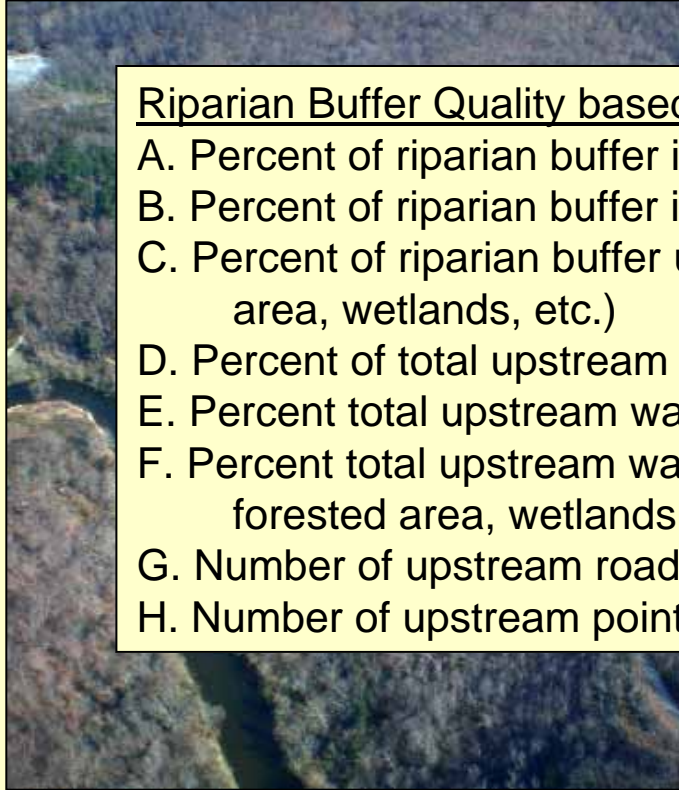
Riparian Buffer Recommendations



Riparian Buffer Ranking

Riparian Buffer Quality based on:

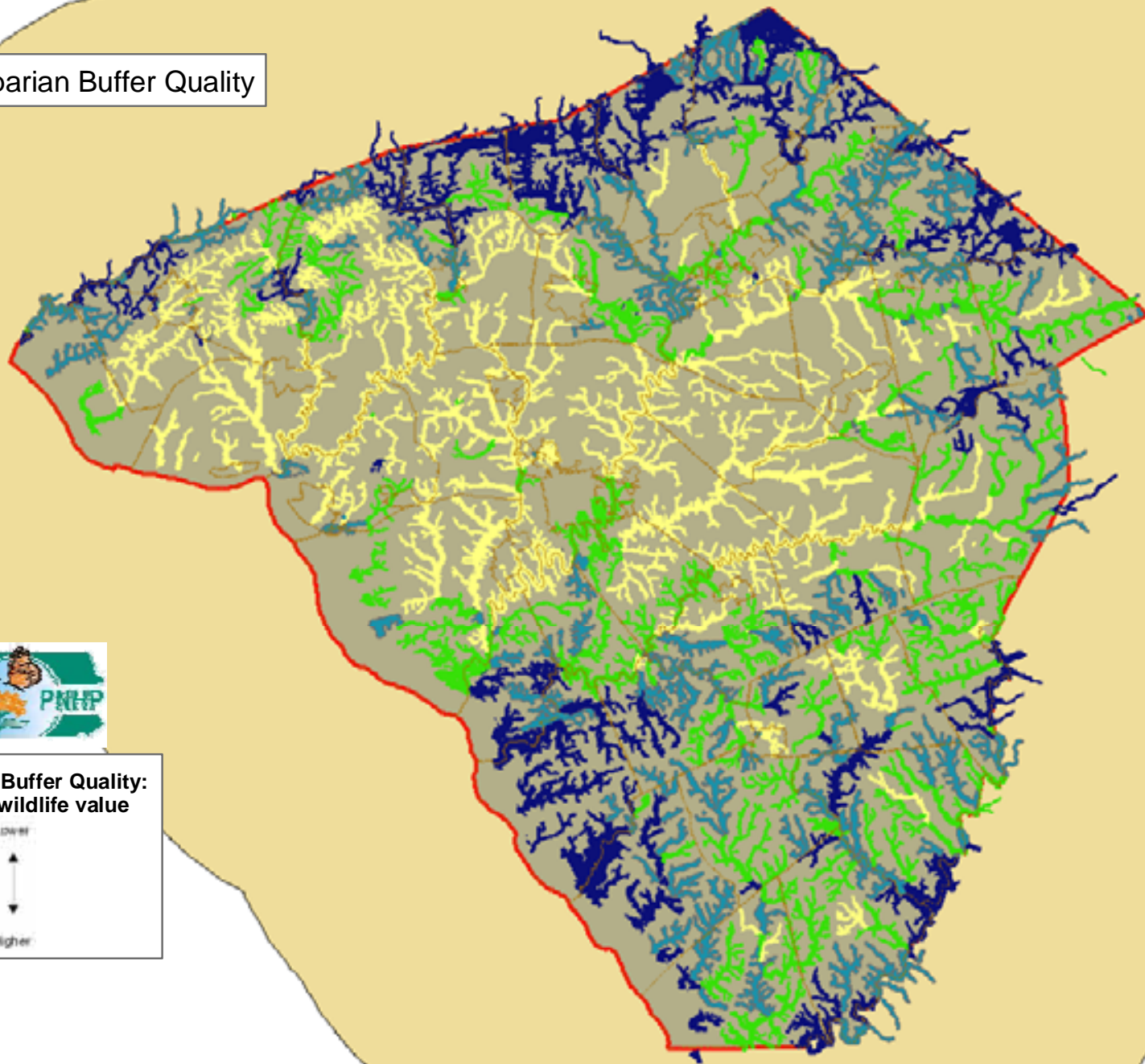
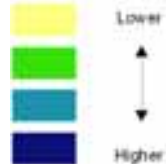
- A. Percent of riparian buffer in agriculture
- B. Percent of riparian buffer in urbanization
- C. Percent of riparian buffer undeveloped (combined forested area, wetlands, etc.)
- D. Percent of total upstream watershed agriculture
- E. Percent total upstream watershed urbanization
- F. Percent total upstream watershed undeveloped (combined forested area, wetlands, etc.)
- G. Number of upstream road crossings
- H. Number of upstream point sources of pollution



Riparian Buffer Quality

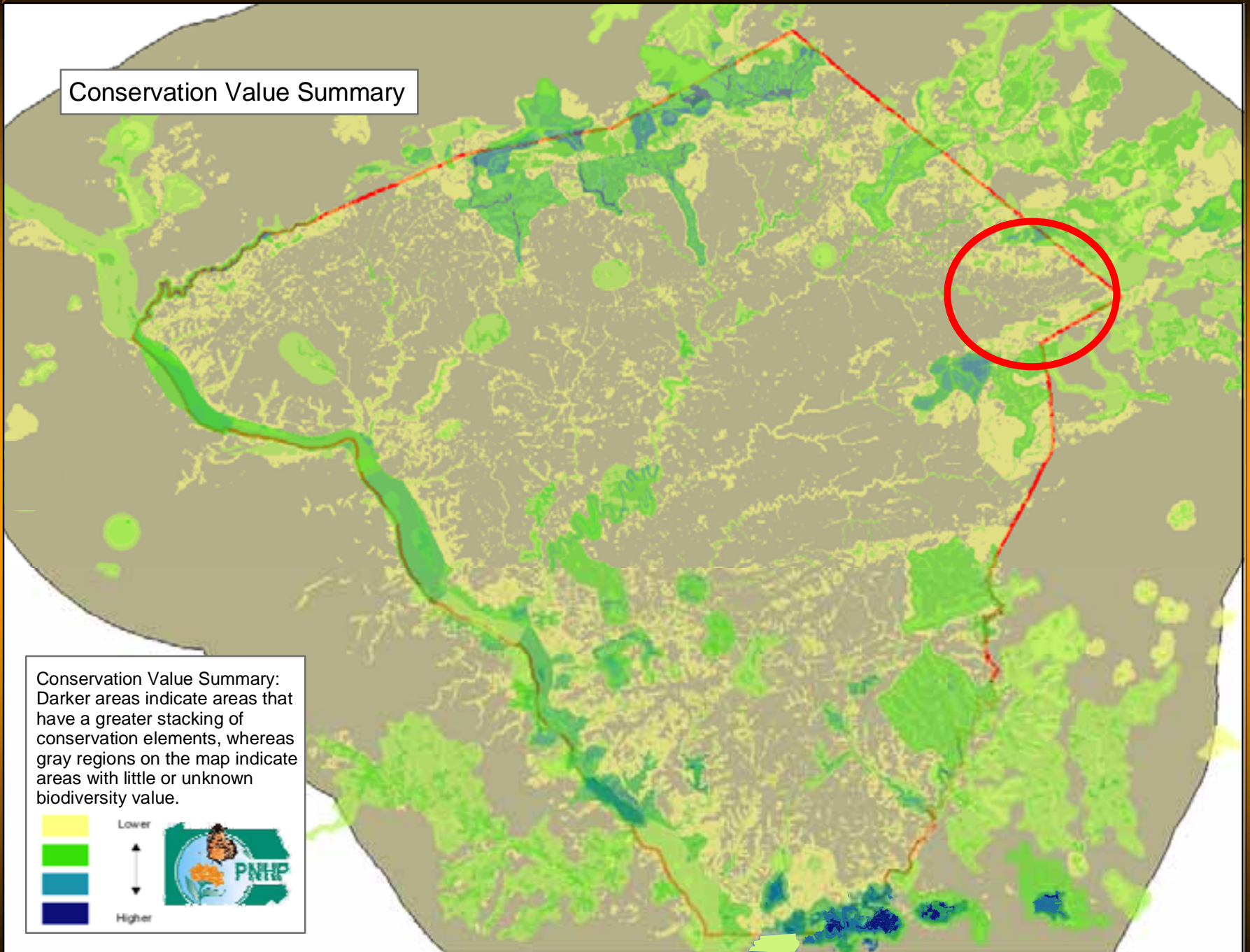
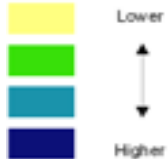


Riparian Buffer Quality:
Relative wildlife value



Conservation Value Summary

Conservation Value Summary:
Darker areas indicate areas that have a greater stacking of conservation elements, whereas gray regions on the map indicate areas with little or unknown biodiversity value.



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Thank You



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