

Study funded by:  
**Pennsylvania DCNR**  
and  
**Montgomery County, PA**

# John James Audubon Center at Mill Grove

## Site and Natural Resources Plan

### Public Presentation at Lower Providence Township

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## **Presentation:**

- **Mission/Purpose**
- **Historical Context**
- **Existing Conditions Analysis**
- **Conceptual Plans**
- **Next Steps**



# Mission/Purpose



# Mission/Purpose

## National Audubon Society and Audubon PA:

**“To conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity [in Pennsylvania].”**

## John James Audubon Center at Mill Grove:

**“...to connect people with nature within the special context of a national historic site and through the appreciation of John James Audubon's life and art. In the future the Center will tell the story of the stirring of the American conservation movement and the protection of birds, wildlife and habitat through the compelling art of John James Audubon.”**

# Mission/Purpose

## Site and Natural Resources Plan for Mill Grove:

“...to develop a plan that will include strategies to restore portions of the historic landscape, provide meaningful outdoor experiences for visitors, and significantly enhance habitats for native birds and wildlife.”



## Mill Grove and Montgomery County

- The 175-acre property is owned by Montgomery County - Audubon PA leases the house and 67 acres surrounding it.
- The property is managed by County maintenance staff.
- This Site & Natural Resources Plan includes the entire property.



## **Mill Grove Process/Timeline**

**The Site and Natural Resources Plan is one step in the long-term planning for Mill Grove:**

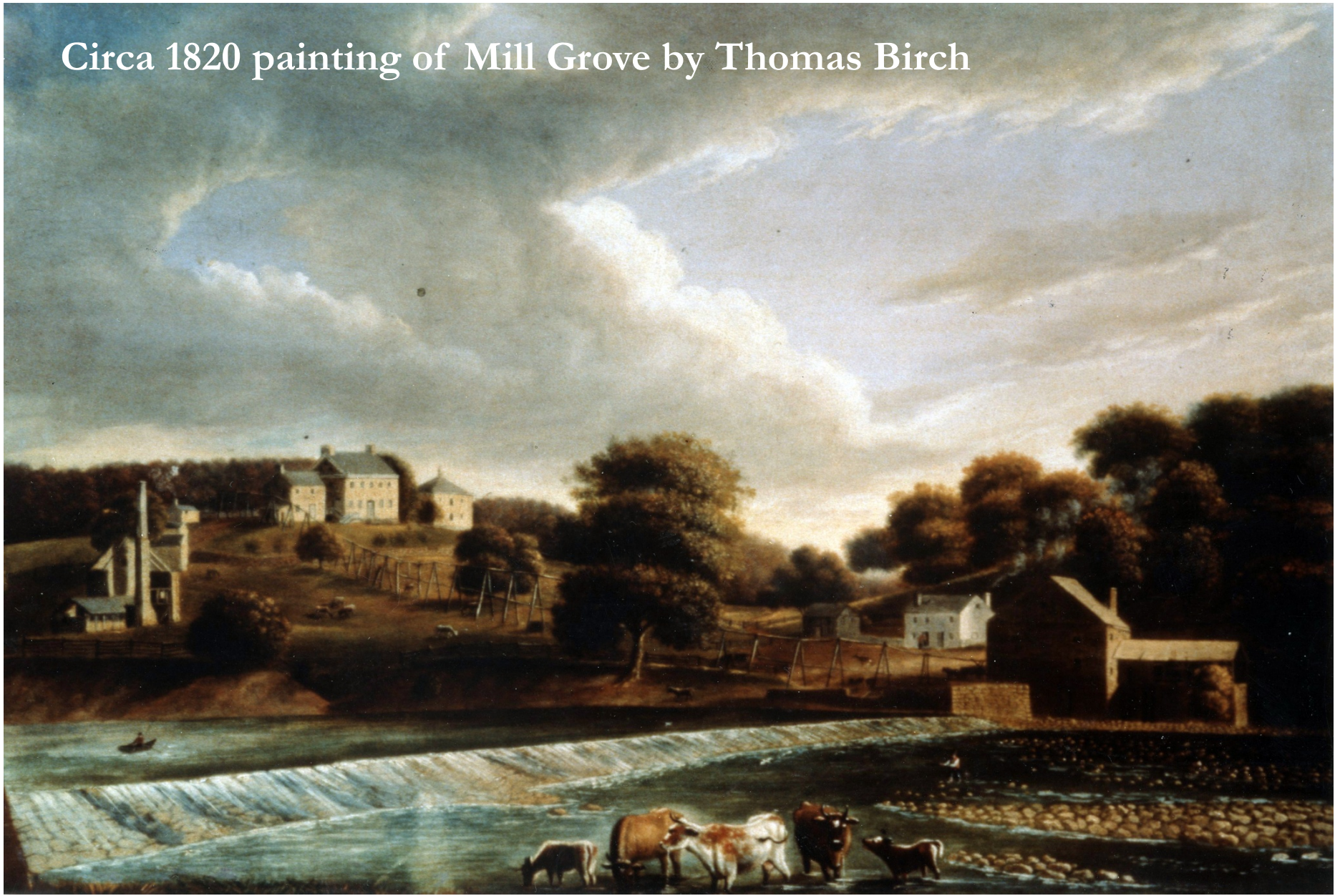
- **A number of studies/plans for the site have been undertaken over the years.**
- **A historic overview/assessment of the house was performed in 1996.**
- **The Site and Natural Resources Plan will be completed in early 2009.**



# Historical Context



Circa 1820 painting of Mill Grove by Thomas Birch



# Mill Grove Estate

- 1699 – Created by a William Penn land grant  
Estate named for the grist and wood mills
- 1762 – House built
- 1789 – Purchased by Captain Jean Audubon
- 1803 – First home in America of John James Audubon





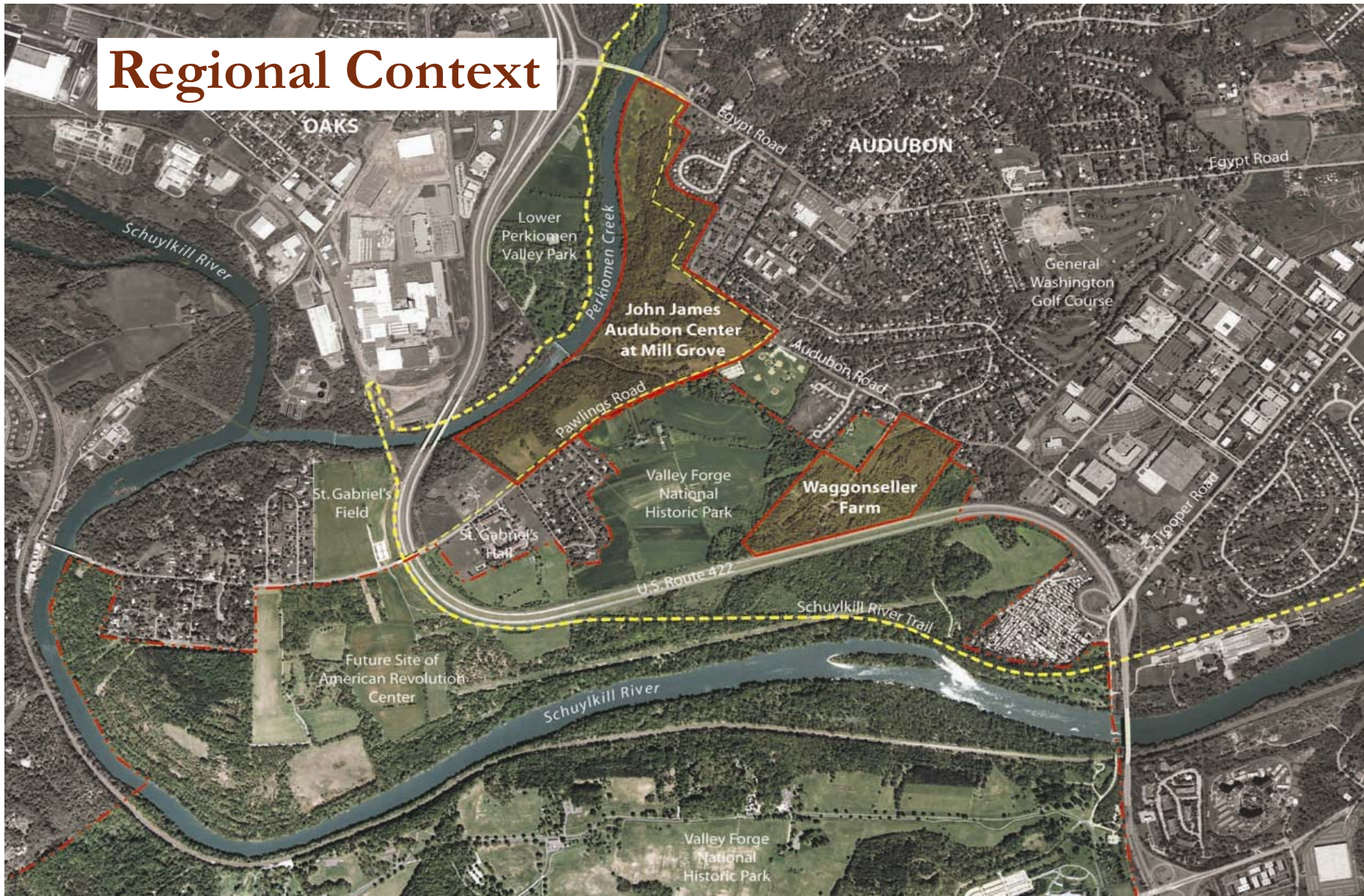




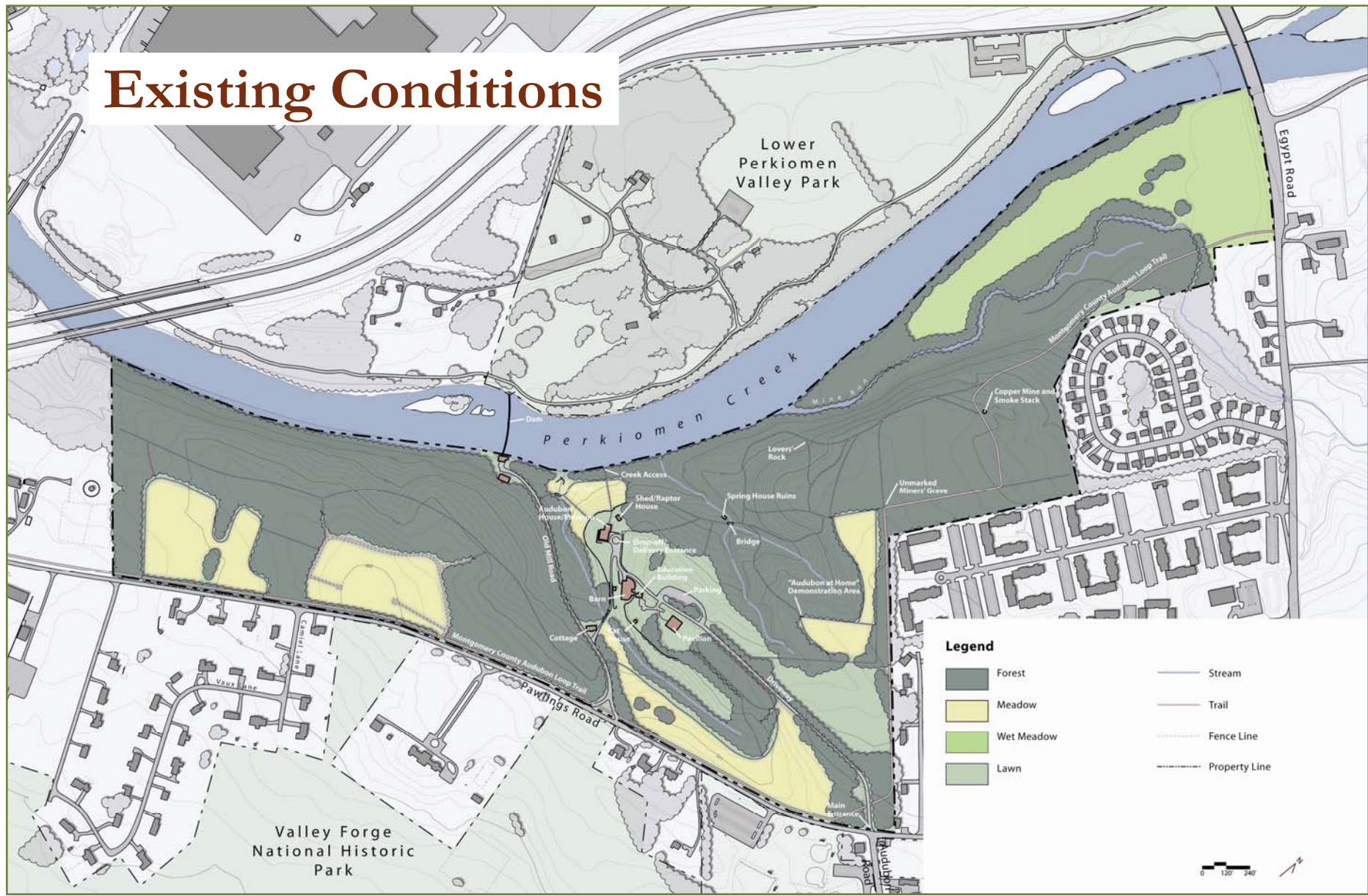


# Existing Conditions Analysis

# Regional Context



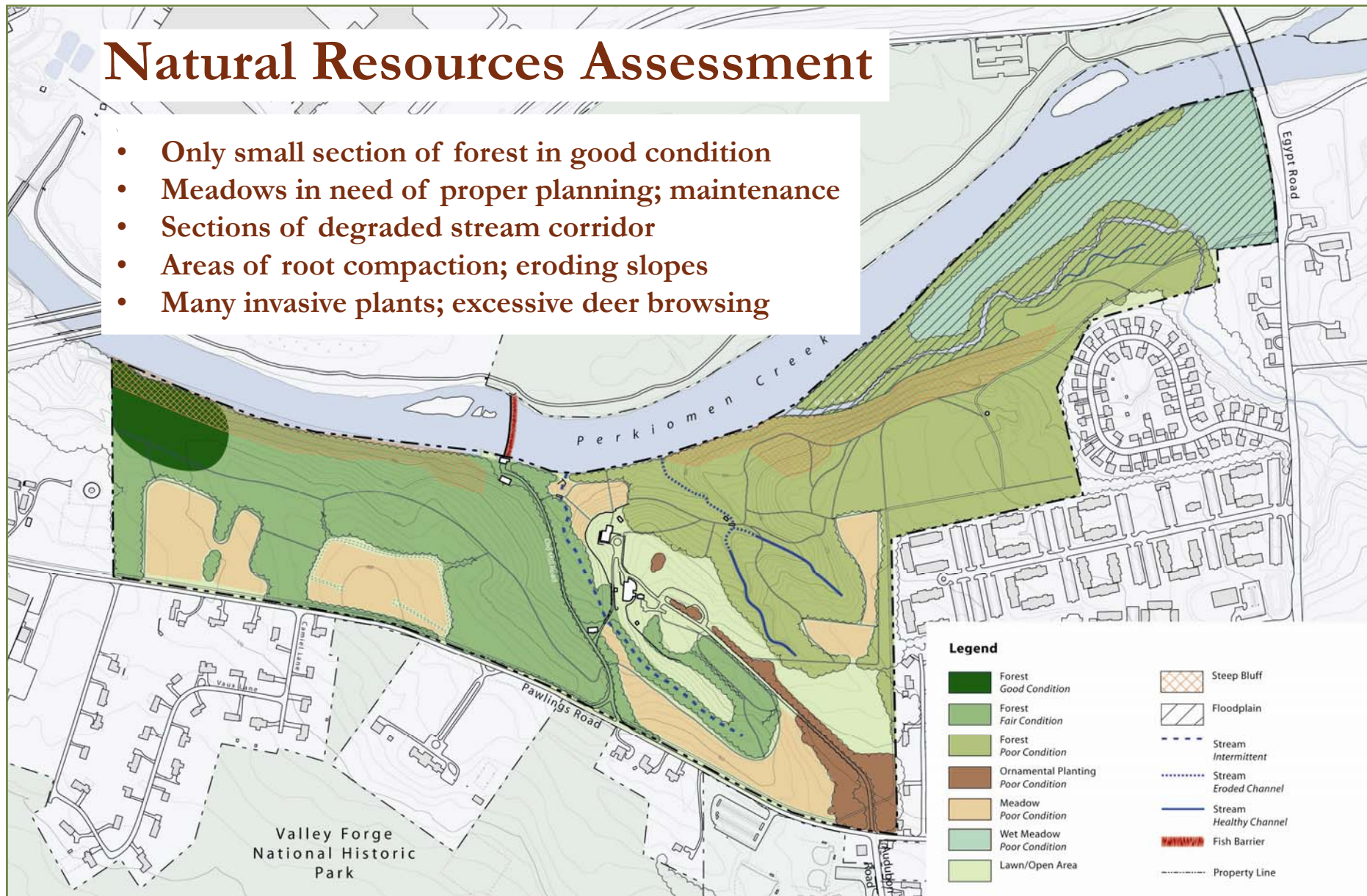
# Existing Conditions





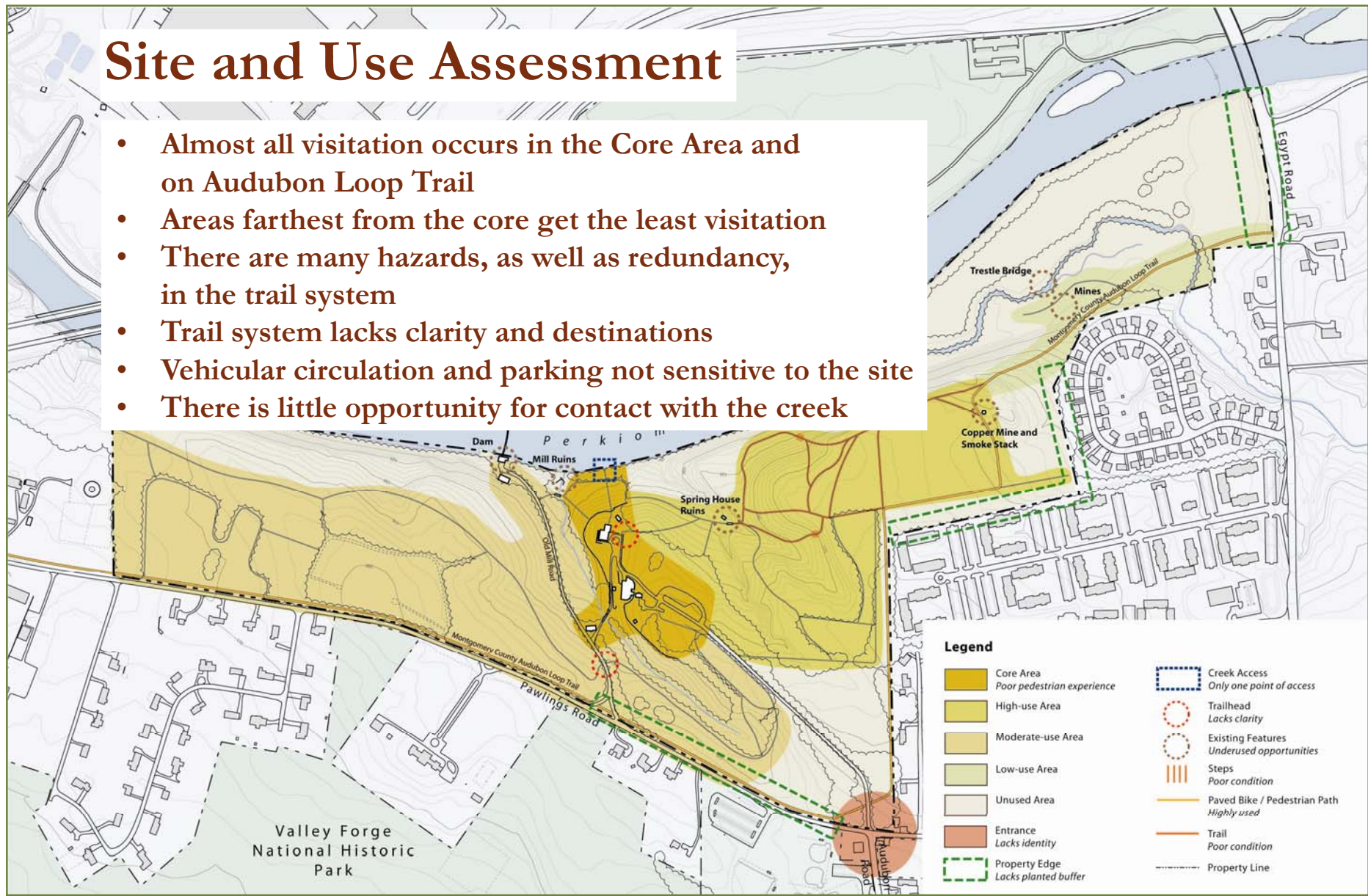
# Natural Resources Assessment

- Only small section of forest in good condition
- Meadows in need of proper planning; maintenance
- Sections of degraded stream corridor
- Areas of root compaction; eroding slopes
- Many invasive plants; excessive deer browsing



# Site and Use Assessment

- Almost all visitation occurs in the Core Area and on Audubon Loop Trail
- Areas farthest from the core get the least visitation
- There are many hazards, as well as redundancy, in the trail system
- Trail system lacks clarity and destinations
- Vehicular circulation and parking not sensitive to the site
- There is little opportunity for contact with the creek





















# Conceptual Plans for Mill Grove



## **Main Actions:**

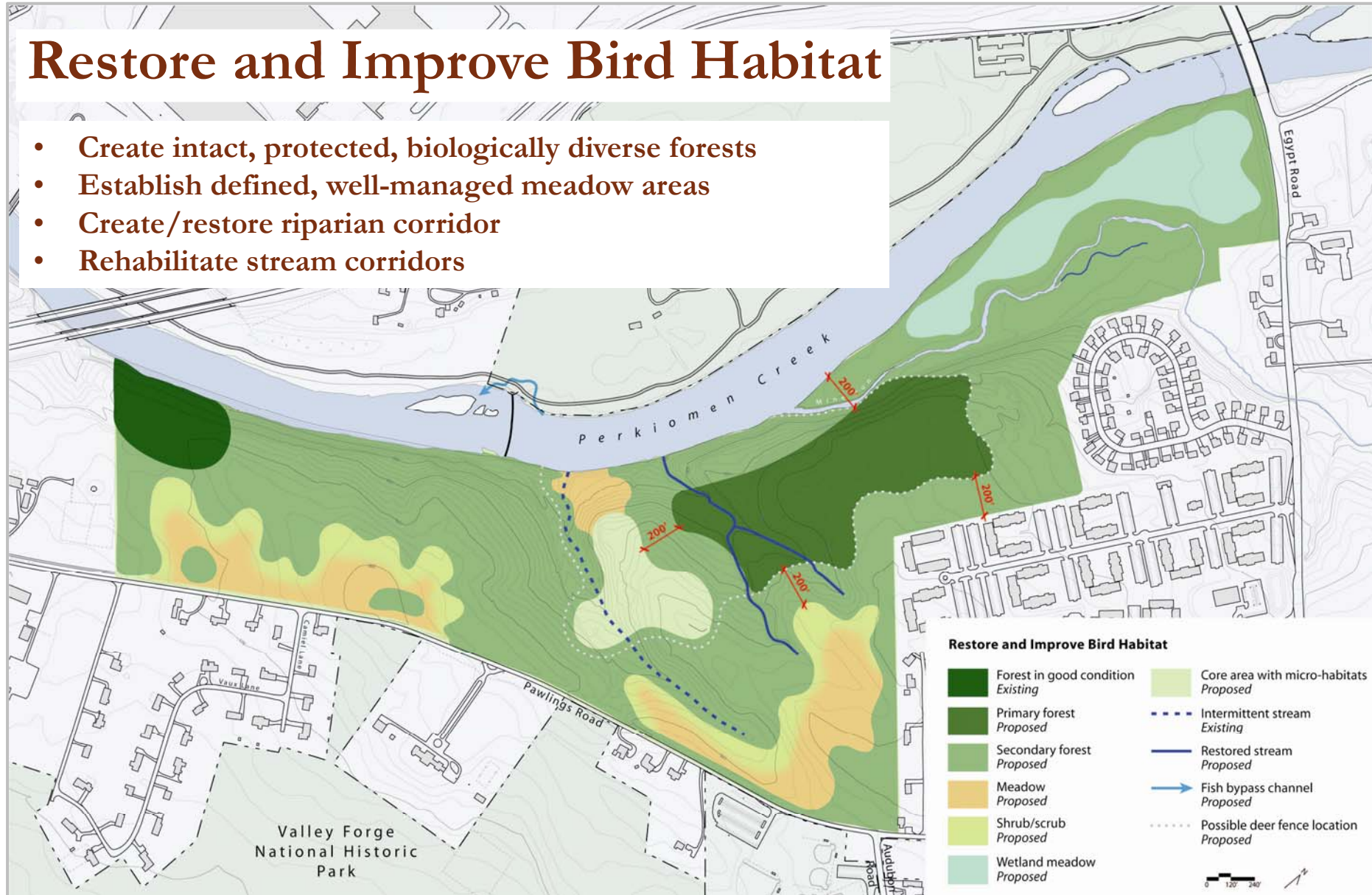
- 1) Restore and Improve Bird Habitat**
- 2) Increase Connectivity and Improve Circulation**
- 3) Enliven and Enrich the Visitor Experience**



# 1) Restore and Improve Bird Habitat

# Restore and Improve Bird Habitat

- Create intact, protected, biologically diverse forests
- Establish defined, well-managed meadow areas
- Create/restore riparian corridor
- Rehabilitate stream corridors



# Inspirations/Precedents: Stream Rehabilitation



**Before**



**After**

- **Reconstruct/stabilize and plant stream banks**
- **Use rocks/boulders to form pools and riffles**
- **Result is improved water quality and the creation of macroinvertebrate, crustacean, amphibian, fish, and bird habitat**

# Inspirations/Precedents: Meadow Management




- Create native grassland and/or wildflower meadows
- Establish correct management regimen for each: mowing, replanting, etc.

# Inspirations/Precedents: Forest Rehabilitation



- **Limit Trail Intrusion and Fragmentation**
- **Manage Deer to Reduce Browsing**
- **Remove /Control Invasive Plants**

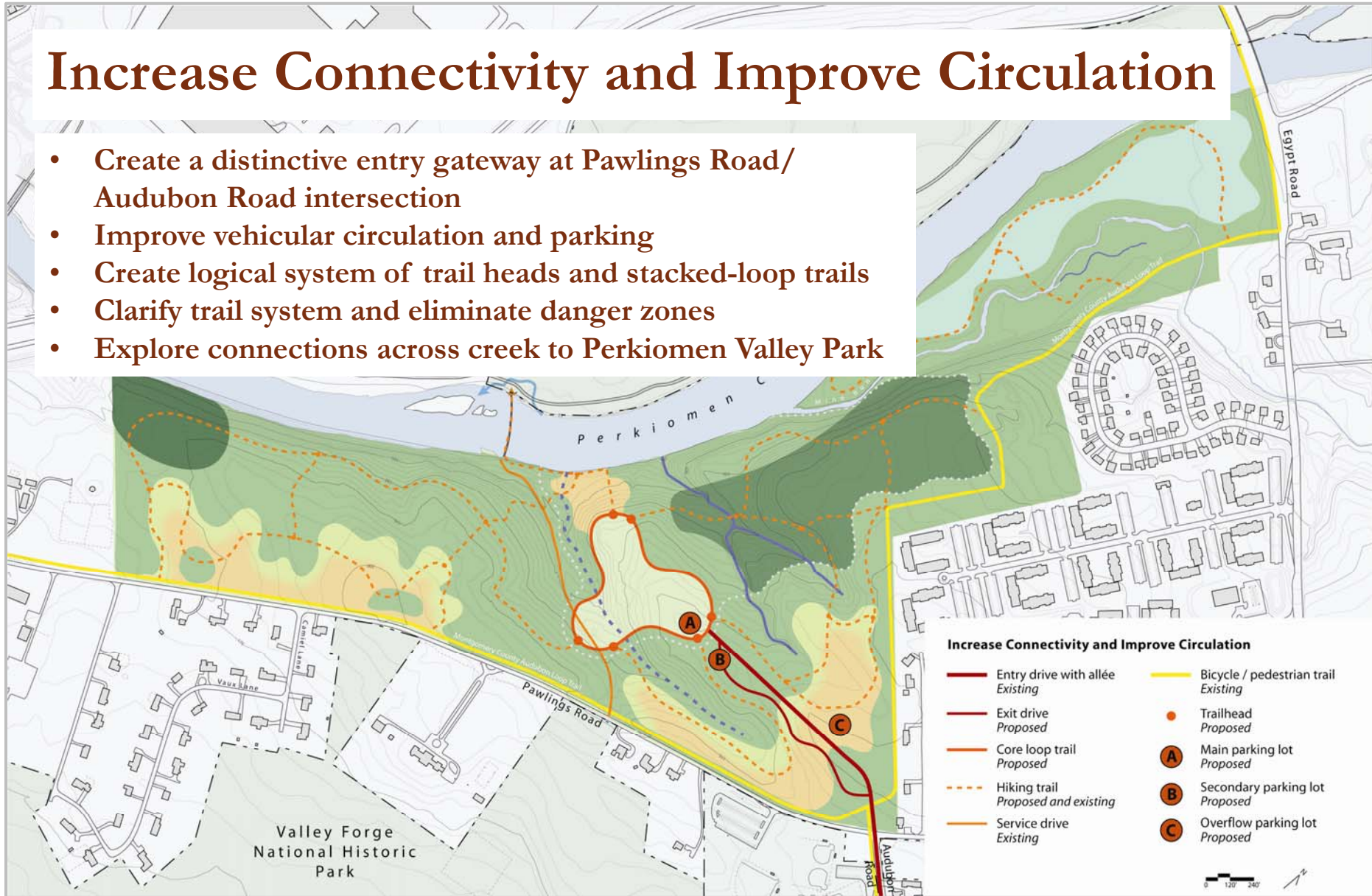




## 2) Increase Connectivity and Improve Circulation

# Increase Connectivity and Improve Circulation

- Create a distinctive entry gateway at Pawlings Road/ Audubon Road intersection
- Improve vehicular circulation and parking
- Create logical system of trail heads and stacked-loop trails
- Clarify trail system and eliminate danger zones
- Explore connections across creek to Perkiomen Valley Park



## Inspirations/Precedents: Circulation



**Allee at Ash Lawn-Highland  
Albemarle County, VA**

# Inspirations/Precedents: Trails

## Trailheads & Signage



## Trail Surfaces



# Inspirations/Precedents: Pavement Options



**Porous  
Pavement**

**Grass Block**



**Biofiltration Swale with  
Conventional Paving**



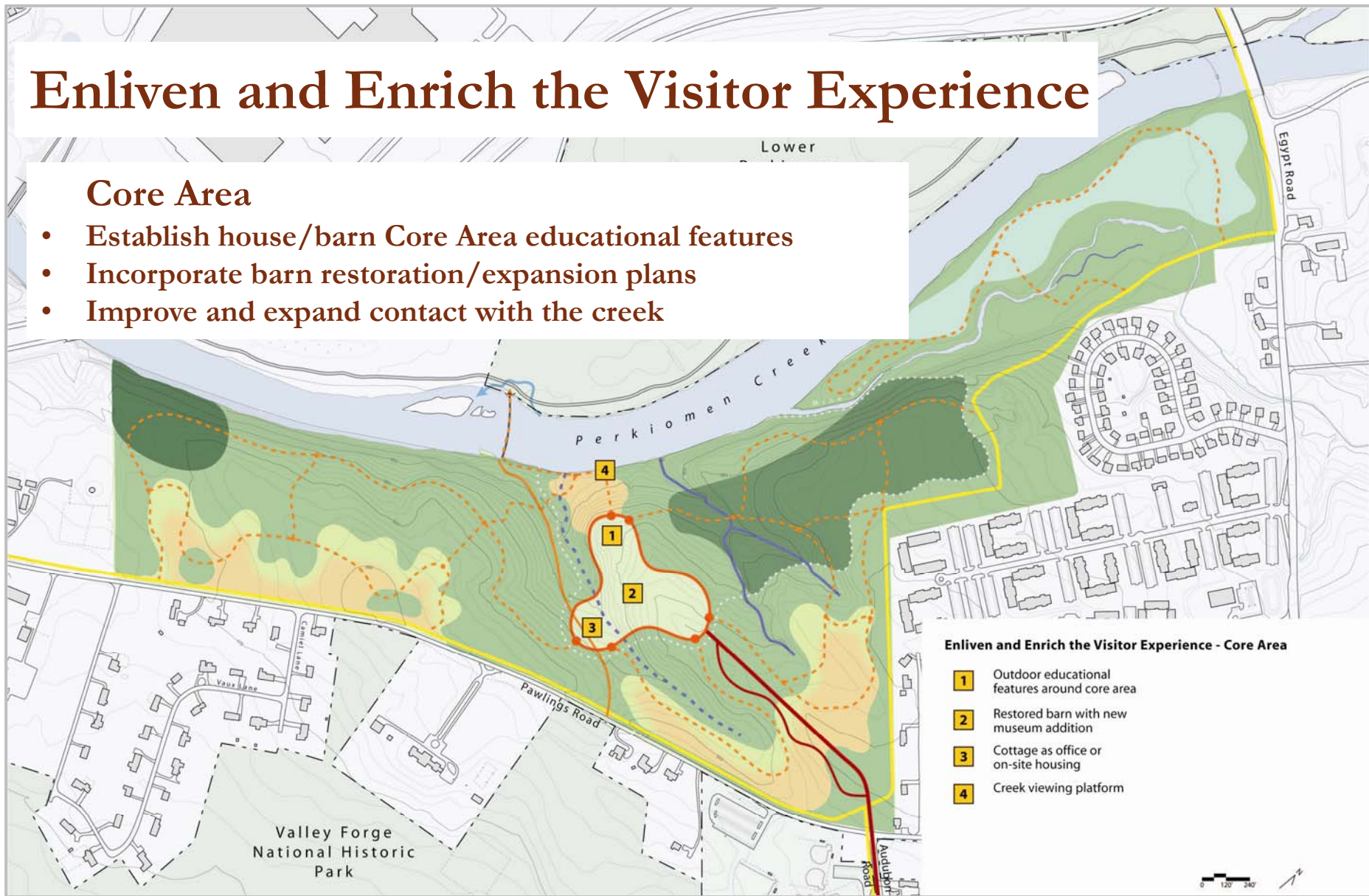


### 3) Enliven and Enrich the Visitor Experience

# Enliven and Enrich the Visitor Experience

## Core Area

- Establish house/barn Core Area educational features
- Incorporate barn restoration/expansion plans
- Improve and expand contact with the creek



# Inspirations/Precedents: Education in the Core Area



**Butterfly Gardens**



**Rain Gardens**



**Snake “Hibernaculum”**



**Bee Colonies**



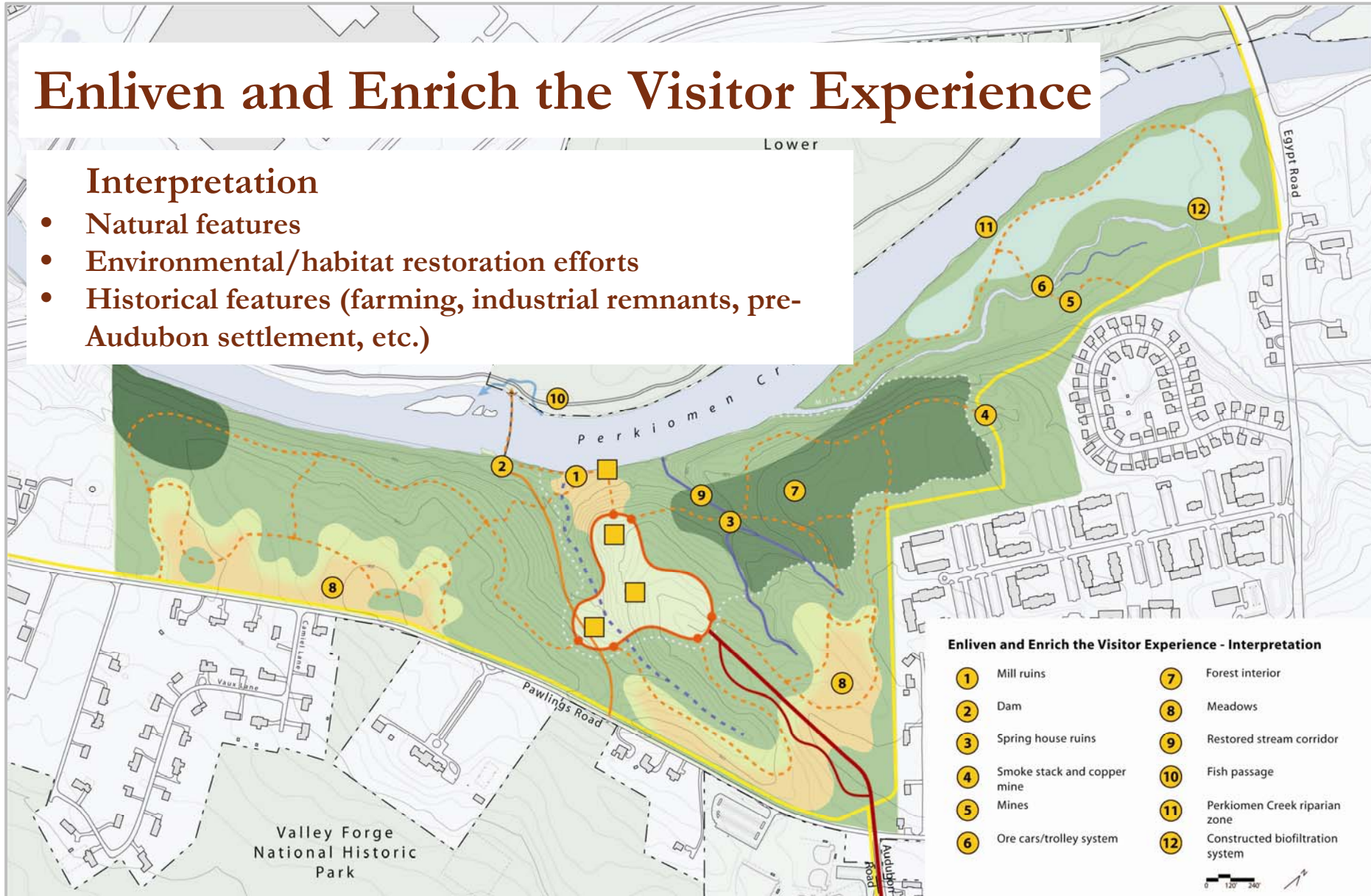
# Inspirations/Precedents: Expanded Contact with the Creek



# Enliven and Enrich the Visitor Experience

## Interpretation

- Natural features
- Environmental/habitat restoration efforts
- Historical features (farming, industrial remnants, pre-Audubon settlement, etc.)



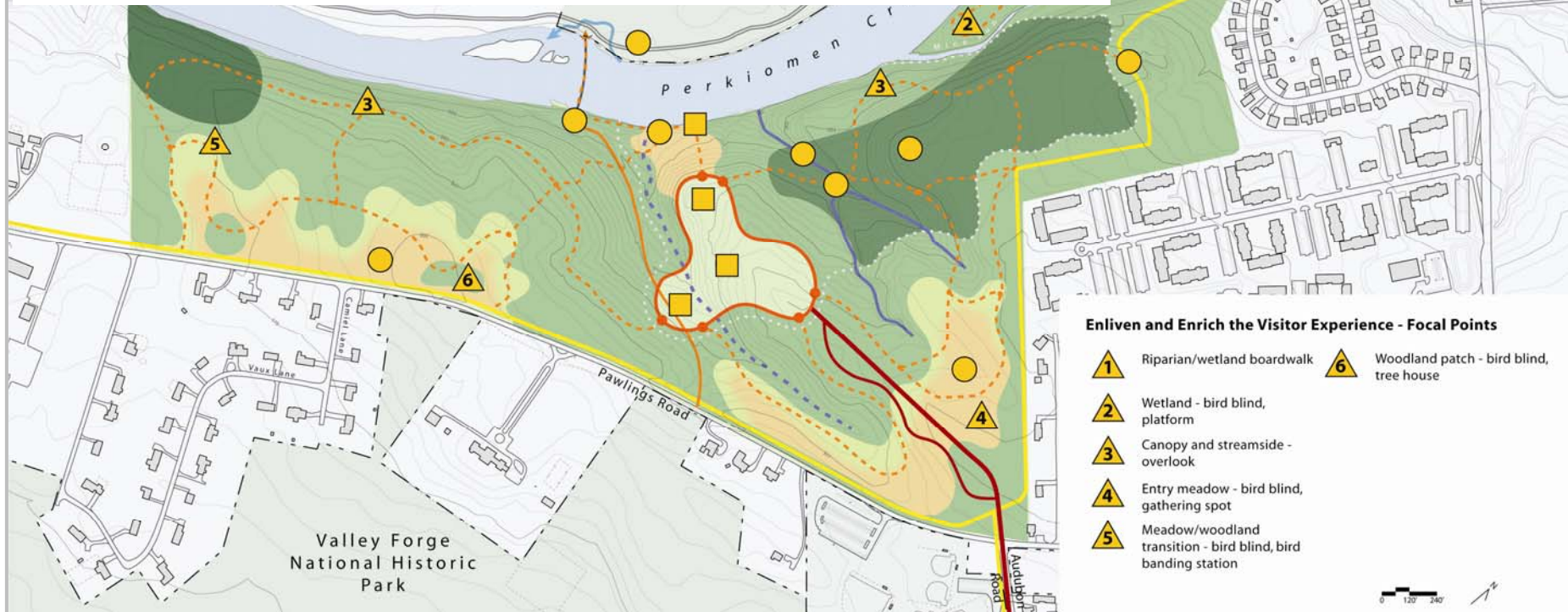
# Inspirations/Precedents: Interpretation



# Enliven and Enrich the Visitor Experience

## Focal Points

- Establish a series of focal points, or destinations, for visitors throughout site
- Spread visitors and create interest across entire property
- Destinations can include pavilions, bird blinds, tree houses, overlook platforms, bird banding sites, natural play features, etc.



# Inspirations/Precedents: Focal Points



# Inspirations/Precedents: Focal Points



# Inspirations/Precedents: Platforms & Boardwalks



# Inspirations/Precedents: Natural Art/Installations



**Note: installations such as these would only be appropriate outside the historic core of Mill Grove.**





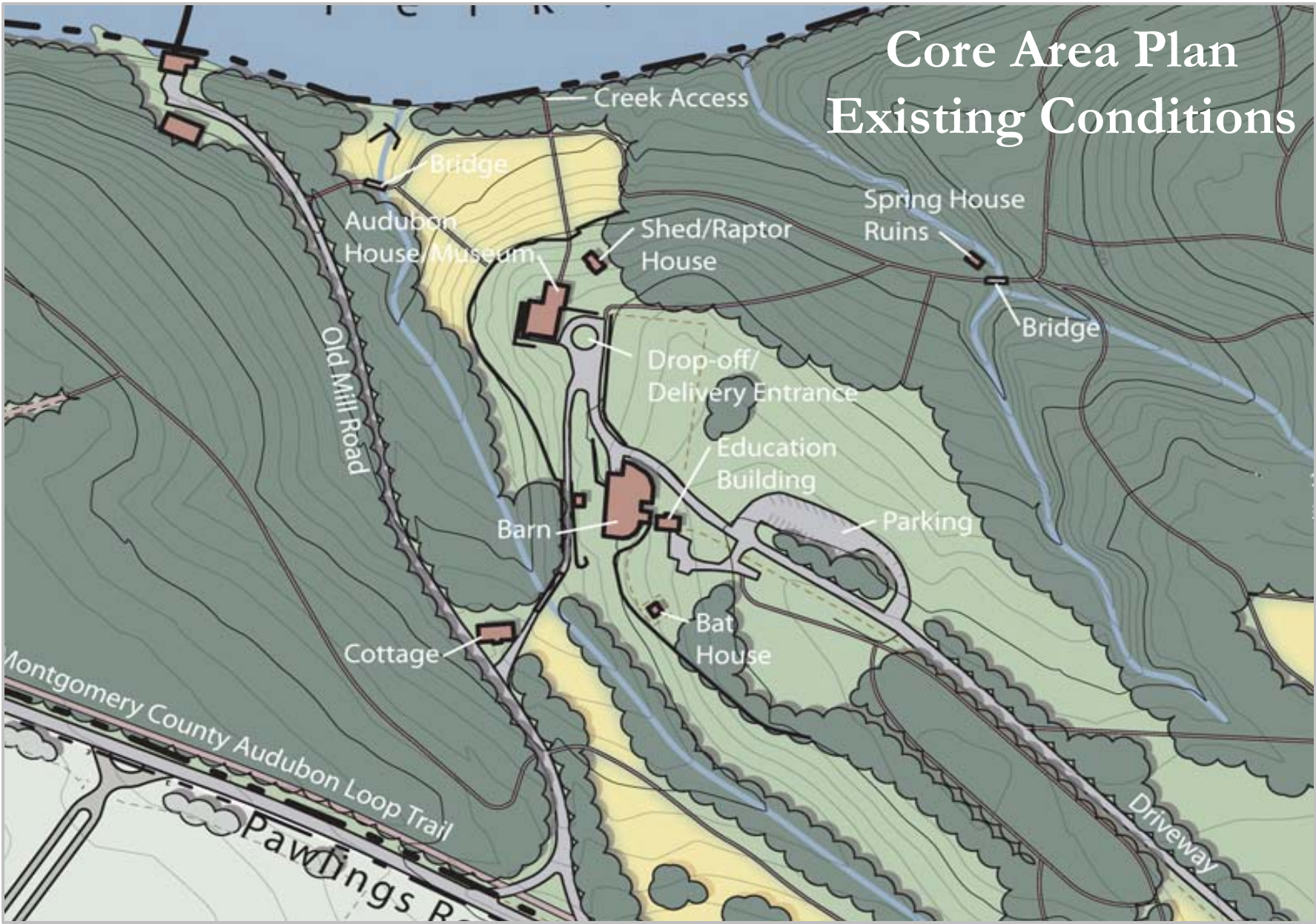
# Detailed Core Area Plan



## Organizing Concepts for Core Area Plan:

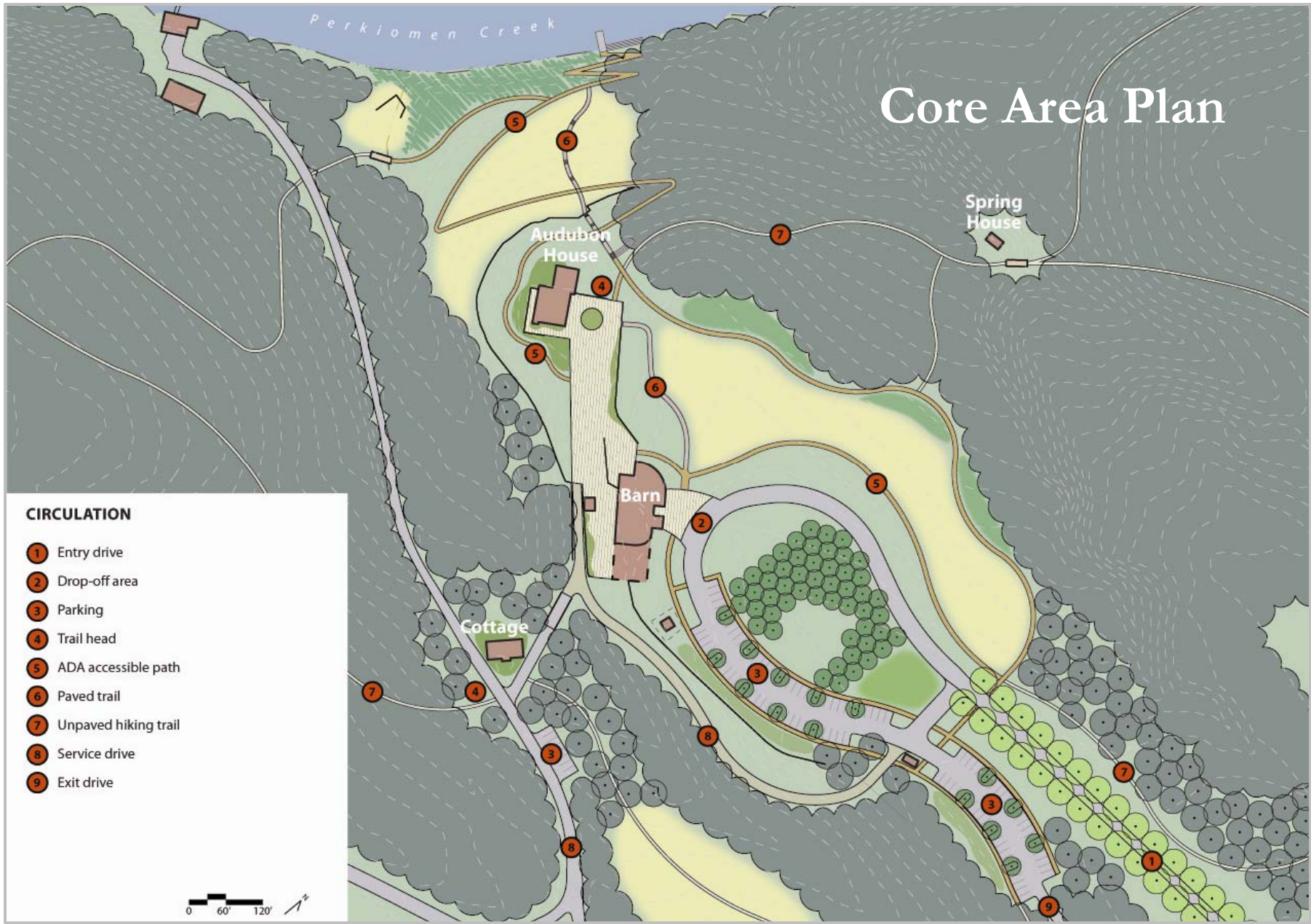
- Clarify circulation (vehicular & pedestrian)
- Define core landscapes and progression of visitor experiences
- Create a strong physical and visual connection to the creek
- Establish a naturalized, less maintenance-intensive, meadow condition in open areas
- Create a series of demonstration gardens and micro-habitats

# Core Area Plan Existing Conditions





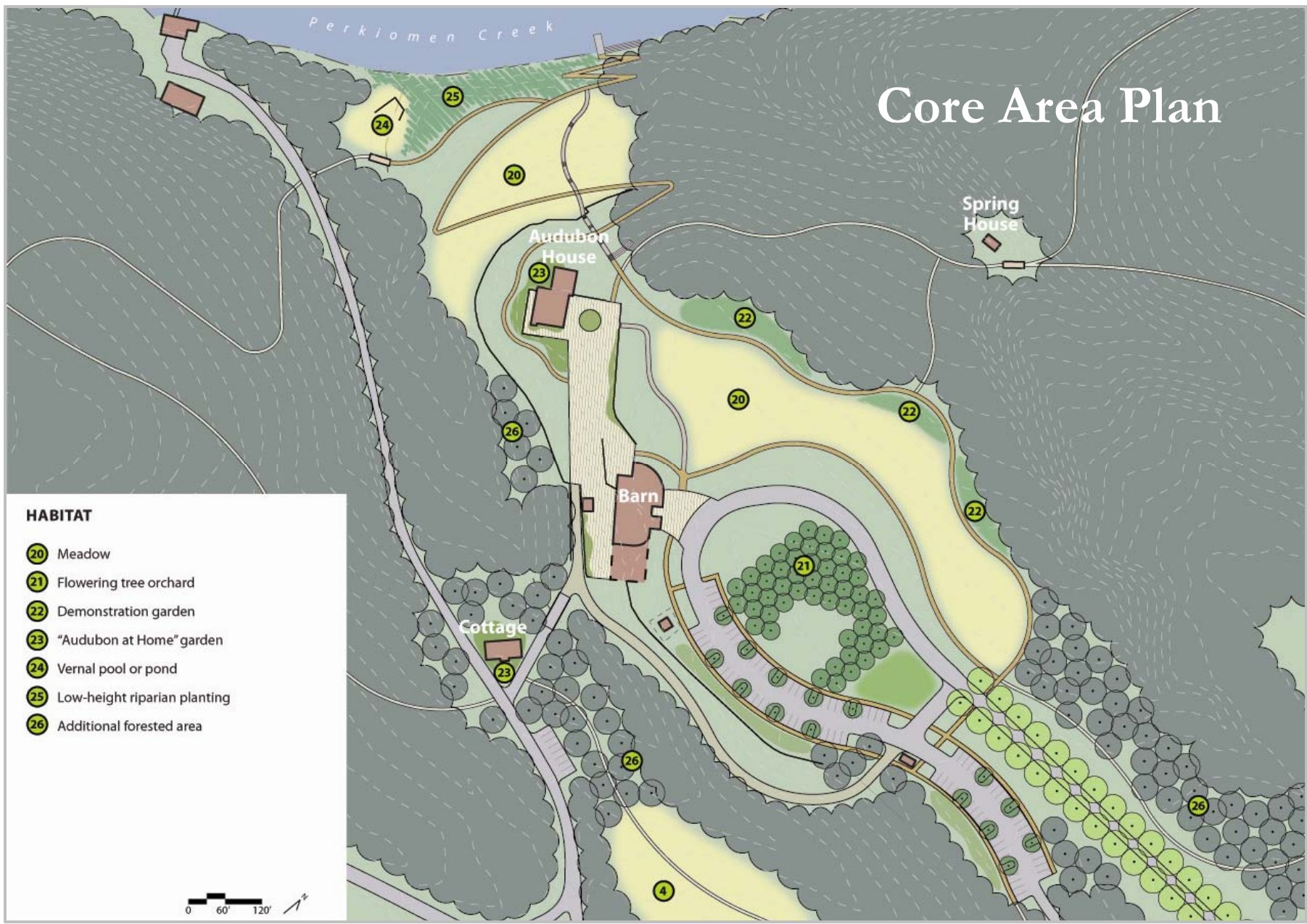
# Core Area Plan



# Core Area Plan



# Core Area Plan





## Next Steps:

- **Final Plan and Report**
- **Discussion**