

Coventry Woods Stewardship Plan

North Coventry Township

Chester County, PA

June 2026
Draft

Acknowledgements

Steering Committee:

- Bill Soumis, Board of Supervisors
- Erica Batdorf, Township Manager
- Edie Shean-Hammond, Open Space Review Board
- Jay Erb, Township Parks and Recreation
- Jim Marks, Board of Supervisors
- Jim White, Planning Commission
- Jon Mckee, Roadmaster
- Karl Russek, Environmental Advisory Council
- Leigh Schoield, Planning Commission

Technical Support:



Coventry Woods Stewardship Plan

Site Owner: North Coventry Township

Inclusion in the DCNR Forest Stewardship Program covers Coventry Woods for a minimum of 10 years. Should North Coventry Township choose to deviate from the guidelines in this Stewardship Plan, the Township agrees to return any applicable signs or designations identifying Coventry Woods as a "Stewardship Forest" to the DCNR Service Forester.

Authorized Township Representative

Date

Name/Title: _____

Forest Stewardship Program Certification

North Coventry Township is satisfied with the content and recommendations contained in this Stewardship Plan and will make an honest effort to follow them. The Township understands that the information within this plan may be used by DCNR for conservation planning, program administration, and related stewardship purposes.

Authorized Township Representative

Date

Name/Title: _____

I certify that this Stewardship Plan meets the requirements of the DCNR Forest Stewardship Program.

DCNR Service Forester

Date

PA Unique ID # (For DCNR Use Only)

Date

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EXECUTIVE SUMMARY

The Coventry Woods Stewardship Plan organizes existing policies and programs into a unified stewardship framework, defines conservation priorities and management units, sets sitewide and unit-specific goals, and introduces a Stewardship Task Schedule to support work planning, coordination, budgeting, and grant development. It establishes a model that can be applied across the Township's open space system.



BACKGROUND

- How to use this Plan
- Open Space Assessment
- Community Outreach



How to use this Plan

This Stewardship Plan is written for use by North Coventry Township staff, the Public Works Department, Parks and Recreation, the Open Space Review Board, and the Environmental Advisory Council (EAC). It is intended to function as both a practical management reference for day-to-day decision-making and a long-term guide for stewardship planning.

This Plan brings together and builds upon existing plans, site assessments, and prior management efforts, including the 2013 Coventry Woods Stewardship Plan, the Invasive Plant Management Plan (2023), and the Natural Lands Stewardship Handbook (2014). More information on previous planning efforts is provided in **Appendix A- Open Space Assessment**.

The Plan is organized to move from understanding site conditions, to defining stewardship direction, to implementing on-the-ground management. It documents existing conditions and stewardship issues and establishes the conservation values, priorities, and sitewide stewardship goals that guide decision-making. It then provides a management planning framework by defining stewardship management units and applying goals and strategies to each unit based on existing conditions, vulnerabilities, and management opportunities.

This planning framework is translated into a **Stewardship Task Schedule (Appendix D)** that supports implementation, annual work planning, coordination, budgeting, and progress tracking. The Plan also provides clear project descriptions, priorities, and supporting rationale that can be used directly in grant applications and funding requests. Together, these components allow the Plan to function as a coordinated tool for daily management, capital improvements, grant development, volunteer and partner engagement, and long-term stewardship of Coventry Woods.

This Stewardship Plan also serves as a roadmap for the management of other Township-owned open space properties. It presents a comprehensive approach that integrates ecological stewardship and cultural interpretation with public-use considerations, establishes guidelines for both intensive and natural restoration of key conservation areas, and provides scalable management practices adaptable to available resources, staffing capacity, and funding levels.

The Plan, particularly the Task Schedule, is intended to function as a living document. As conditions change, new information becomes available, and management experience grows, it should be updated to reflect evolving conservation priorities and stewardship needs.

Open Space Assessment

An Open Space Assessment was completed to evaluate North Coventry Township's stewardship framework, organizational capacity, and implementation environment for managing Coventry Woods and the Township's broader system of parks, trails, and open space.

Through this process, several themes rose to the top:

Theme 1

The Township demonstrated sustained leadership in open space preservation, protecting more than 1,200 acres of farmland, forest, and neighborhood open space, including the creation of Coventry Woods within the Hopewell Big Woods landscape. A strong foundation for stewardship existed through adopted plans and ordinances, the Open Space Program, advisory boards, volunteer involvement, and operational experience.

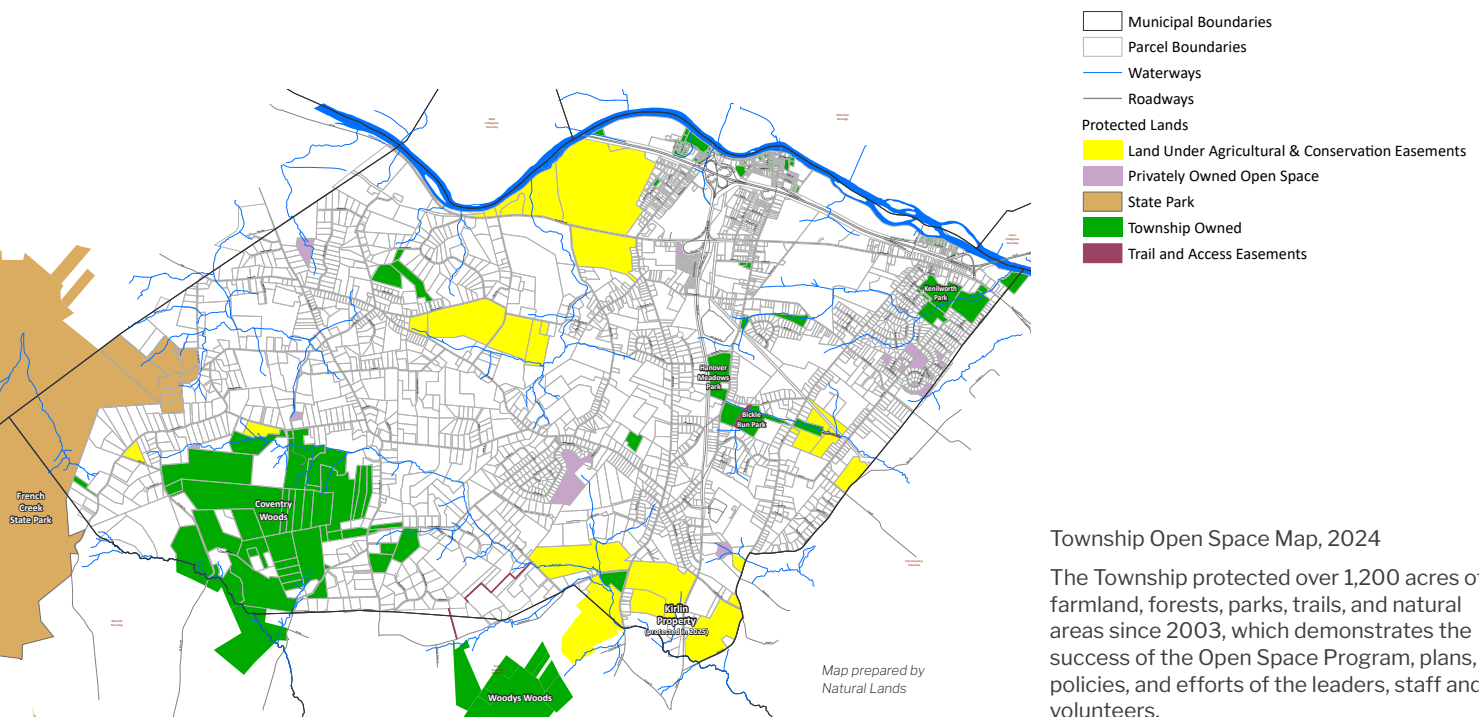
Theme 2

At the same time, the size and ecological complexity of Coventry Woods, along with the expanding amount of Township-owned open space, exceeded the capacity of routine maintenance and project-based management. Staffing and organizational capacity dedicated to invasive species control, forest restoration, water resource protection, trail sustainability, and ecological monitoring remained limited relative to existing needs.

Theme 3

While funding mechanisms and resources were available, a coordinated stewardship framework was needed to align staffing, funding, partnerships, and volunteer efforts and to support long-term stewardship across Coventry Woods and the Township's broader open space system.

The full summary is provided in **Appendix A- Open Space Assessment**.



Community Outreach

The community outreach approach consisted of a Steering Committee, engagement at the Coventry Woods Festival, and stakeholder and partnership review.

The Steering Committee confirmed and refined the key findings of the Open Space Assessment and the prior planning documents, affirming that many general stewardship strategies and specific invasive plant management tasks remain relevant but require a dedicated, coordinated operational approach for implementation.

The Committee identified priority challenges, including invasive species, forest regeneration, trail impacts, public use pressures, funding and capacity limits, and emphasized aligning staff, partners, volunteers, and resources through a task-based stewardship framework.

Community feedback from the Coventry Woods Festival showed strong support for ongoing stewardship of Coventry Woods, including the need for access improvements, invasive species management, and the preservation of natural and historic features, with some signing up to volunteer their support.

Steering Committee representatives also shared the draft Stewardship Plan with their respective departments, organizations, and partner groups for additional review and comment. The draft was also shared with stakeholders and partners who have a direct interest in the site and stewardship, to inform them of the plan, confirm general support, identify implementation opportunities, and gather targeted feedback related to trail maintenance, volunteer coordination, agency coordination, and final plan documentation.

More detail is provided in **Appendix B - Community Outreach**.

Coventry Woods Festival, 2025

Purposes of the event were to increase awareness of open space benefits, define stewardship priorities, and encourage volunteer stewardship at Coventry Woods.



STEWARDSHIP PLAN

- Regional Context and Significance
- Site Assessment
- Stewardship Issues
- Conservation Values, Priorities, and Goals
- Stewardship Management Units
- Stewardship Strategies
- Stewardship Task Schedule



1. Regional Context and Significance

Coventry Woods is a 702-acre open space preserve, most of which lies within North Coventry Township, with portions extending into South Coventry and Warwick Townships. Ownership and management are the responsibility of North Coventry Township. The preserve is a regionally significant conservation site and an important asset for residents and visitors. **See Regional and Site Maps.**

The preserve lies within the Hopewell Big Woods Conservation Area, a 73,000-acre landscape that supports the largest remaining unbroken forest in the Pennsylvania Highlands. This landscape includes French Creek State Park, Hopewell Furnace National Historic Site, State Game Lands #43, Natural Lands' Crow's Nest Preserve, Warwick County Park, and other protected lands that together sustain regionally important forest, riparian, and headwater systems.

The size and configuration of Coventry Woods help buffer the forest interior from edge effects such as increased wind, sunlight, invasive plant encroachment, and edge-adapted wildlife. As a result, the preserve sustains a meaningful block of interior forest habitat that is increasingly uncommon in the region.

Coventry Woods lies within the Hay Creek/French Creek Important Bird Area designated by the National Audubon Society and within an Important Mammal Area designated by the Important Mammal Area Partnership (consisting of the National Wildlife Federation and the Pennsylvania Game Commission and others). The preserve supports forest interior birds, wildlife, and natural systems that depend on large, connected forest areas.

Within the broader Hopewell Big Woods landscape, Coventry Woods plays a role in sustaining biodiversity, protecting headwaters, and maintaining ecological connectivity between large, protected areas.

2. Site Assessment

Coventry Woods is a large contiguous forest preserve that supports regionally significant natural, hydrologic, and wildlife resources. The extensive interior forests, riparian areas, and meadows, support high biodiversity, including interior forest birds, vernal pool amphibians, and mammals.

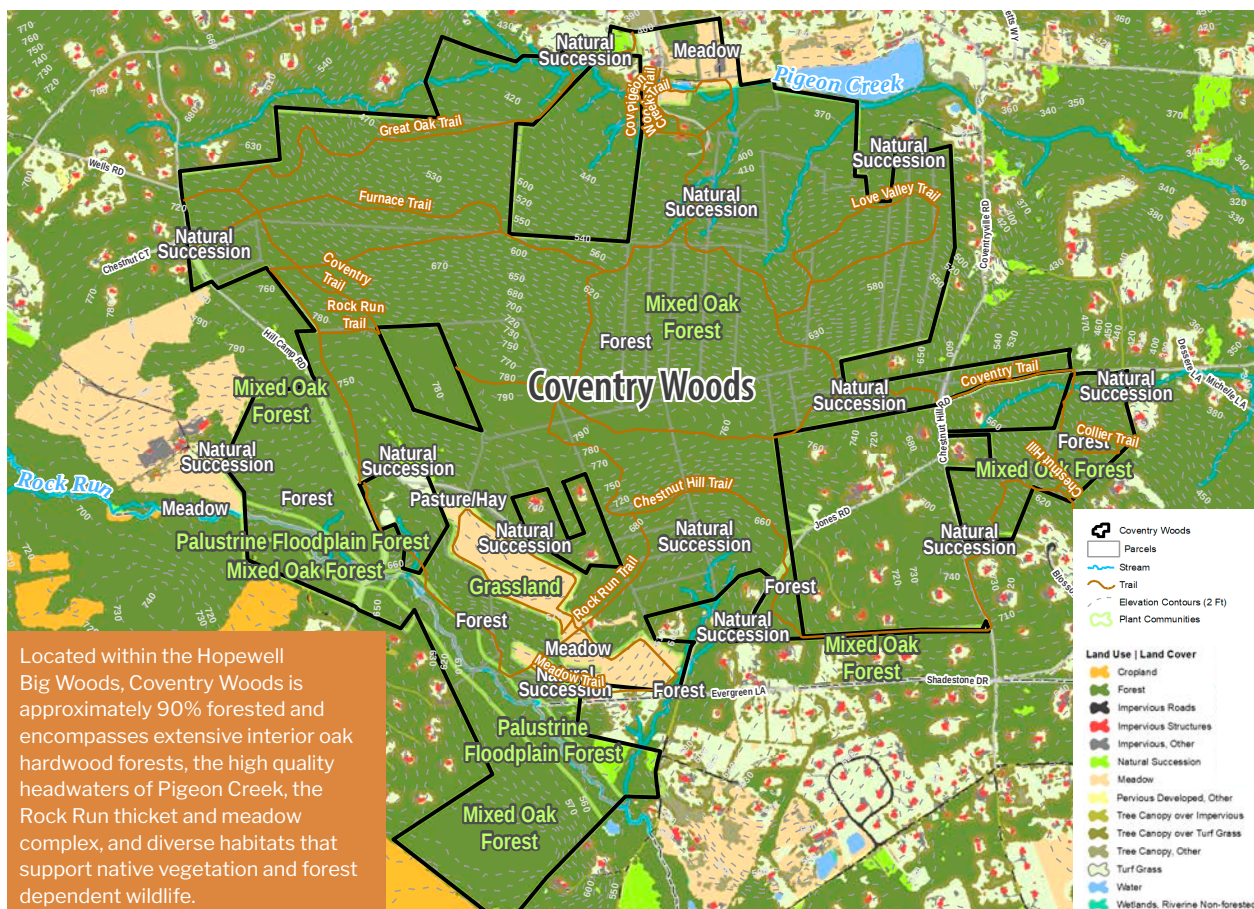
The preserve contains high-quality headwaters of Pigeon Creek and Rock Run, and interconnected streams, wetlands, and floodplains that provide critical water quality, groundwater recharge, and flood attenuation. Coventry Woods also includes historic charcoal hearths and former camp features that enhance the site's cultural and educational value.

While the preserve retains strong ecological integrity, it faces management challenges. Invasive plants are concentrated along forest edges, trail corridors, and disturbed areas. Tree diseases and excessive deer browse affect forest structure and regeneration. Invasive species displace native plants, hinder regeneration, alter soils and hydrology, and degrade habitat structure, food resources, and overall ecological integrity in forests, meadows, and riparian systems. Public access and trail use introduce additional pressures related to erosion, habitat fragmentation, and safety.

These conditions establish the baseline for identifying stewardship issues, conservation values and priorities, and management units, and they inform the goals and management framework presented in the following sections.

Appendix C - Site Inventory and Assessment provides a more detailed summary of the natural resources, cultural and historic resources, and public and recreational uses of Coventry Woods. It explains how these resources influence stewardship needs, the benefits they provide, and their relevance to stewardship decision-making.

Regional and Site Maps



Land Use | Land Cover Map

Data source: Chesapeake Bay Land Use/Land Cover Database, 2022

3. Stewardship Issues

The size and configuration of Coventry Woods insulate interior portions of the forest from many edge effects, including sunlight and wind, infiltration of weed seeds and edge-adapted plants, and access to interior forest by edge-dwelling animal species. The preserve is influenced by invasive plant colonization typical throughout the region, forest health stressors, and increasing public use. These factors interact across management units and require coordinated, preserve-wide stewardship.

The following stewardship issues apply across Coventry Woods and establish the management context for the preserve.

Source: 2013 Coventry Woods Stewardship Plan



Deer browse and tree diseases, such as beech leaf disease, pose a serious threat to the preserve's forest structure and diversity.



Canopy openings increase light, allowing dominant species to colonize and suppress tree seedlings and reduce plant diversity.



Invasives like multiflora rose, Japanese barberry and honeysuckle thrive at the forest margins and where old fields are transitioning to woodland.

3.1 Forest Health

3.1.a Deer Browse and Tree Disease

Lack of tree and shrub regeneration due to excessive deer browse is evident throughout much of the preserve. This condition limits understory development, suppresses shrub and herbaceous layers, reduces long-term structural diversity, and threatens the ability of native forest communities to sustain themselves over time. Without regeneration, future forest composition, resilience, and habitat function are at risk.

Forest health is further challenged by tree mortality associated with emerald ash borer and beech leaf disease. These stressors are increasing the number of dead and declining trees, opening up the forest canopy, changing how much sunlight reaches the ground, and shifting which tree species are present. While small openings are a natural part of forest growth, widespread tree loss can speed the spread of invasive plants, increase erosion and drying of soils, and weaken overall forest structure.

Dead, dying, and structurally compromised trees pose safety risks to visitors, volunteers, and Township staff and create ongoing maintenance challenges along trails, access points, structures, and utilities. At the same time, standing and downed dead wood is ecologically valuable. Stewardship must therefore manage forest decline in a way that supports regeneration, limits secondary impacts, and balances safety with ecological function.

3.1.b Fragmentation and Edge Effects

Although Coventry Woods is a large preserve, it is intersected by roads, trails, utility corridors, former development areas, and inholdings that create internal edges. These edges allow light, wind, and temperature fluctuations to penetrate forest interiors, increasing vulnerability to invasive plant establishment and altering habitat conditions.

Edge environments also provide increased access for predators and nest parasites and reduce habitat quality for forest interior wildlife. The expansion of edge conditions through informal trails, unauthorized clearing, or unmanaged disturbance corridors can incrementally erode the ecological value of the preserve, even where overall forest cover remains high.

Maintaining large, intact forest areas, limiting new areas of disturbance, and managing forest edges are ongoing stewardship concerns.

3.2 Invasive Plants

Invasive plants represent one of the most significant and persistent stewardship challenges at Coventry Woods. Invasive species displace native vegetation, suppress regeneration, alter soil chemistry, disrupt hydrology, and degrade habitat quality for birds, insects, amphibians, and other wildlife. They reduce structural complexity, limit food and cover resources, and compromise the ecological integrity of both forest and riparian systems.

Disturbances such as canopy gaps, trail corridors, mowing, soil disturbance, imported contaminated fill, yard waste dumping, high deer populations, and flood events create opportunities for invasive species to establish and spread. Riparian corridors, forest edges, trails, and former agricultural fields are particularly vulnerable and serve as the main routes for the spread of invasive plants.

It is documented that invasive species are widespread across much of the preserve, particularly along edges, stream corridors, trails, and in fallen tree areas. Complete eradication is not realistic. Management must instead prioritize protecting high-value conservation areas, early detection and rapid response in less-infested zones, strategic suppression in areas where invasives are already established, and restoring treated areas to prevent reinvasion.

Without consistent, long-term management, invasive plants will continue to expand into interior forest, suppress native regeneration and succession, and undermine investments in forest health, trail improvements, and restoration efforts.

3.3 Wildlife Habitat and Biodiversity

Coventry Woods lies within federally and regionally designated important bird and mammal areas that support forest interior bird species, wide-ranging mammals, amphibians associated with forested wetlands and vernal pools, and a wide range of other wildlife dependent on large, connected forest systems.

Interior forest-dwelling birds are particularly sensitive to fragmentation, invasive species in the understory, and loss of structural diversity. Many of these species are already under pressure across their ranges and depend on high-quality breeding habitat. Maintenance of large, contiguous forest blocks, diverse age structure, intact riparian corridors, and functional understory layers is essential to sustaining these populations.

Mammals documented or expected within the Hopewell Big Woods landscape include black bear, bobcat, and species associated with extensive forest and riparian networks. Amphibians depend on intact forested wetlands and vernal pools, which are highly sensitive to hydrologic, soil, and vegetation changes.

Wildlife stewardship at Coventry Woods is therefore closely linked to forest condition, invasive species management, riparian protection, and careful management of public access.



Winter creeper spreads rapidly across the forest floor and up tree trunks, smothering native groundcover and preventing young trees from establishing.



Multiflora rose spreads aggressively and forms dense, thorny thickets that block access and suppress native shrubs, wildflowers, and tree regeneration..



The interior woods of Coventry Woods support and protect high quality habitats for forest birds, including the declining Cerulean Warbler.



Sensitive riparian areas at Coventry Woods need protected vegetation and managed access to prevent erosion, invasives, habitat loss, and impacts.



The former campground area serves as a community hub, education center, and main access point, and therefore requires careful management to address heavier visitor impacts.

Source: 2013 Coventry Woods Stewardship Plan

3.4 Water Resources

Streams, seeps, wetlands, impoundments, and floodplain forests are among the most sensitive resources at Coventry Woods. These areas are particularly vulnerable to erosion, trampling, altered drainage, and invasive plant colonization. Because they function as ecological corridors, they also play a disproportionate role in both wildlife movement and the spread of invasive species throughout the preserve.

Degradation of riparian areas can destabilize streambanks, increase sedimentation, alter water temperature, and reduce aquatic habitat quality. These impacts affect not only on-site resources but also downstream waters in both the Pigeon Creek and Rock Run watersheds.

Protecting riparian vegetation, maintaining natural water flows, and carefully managing access in these areas are essential to keeping streams healthy and supporting fish, wildlife, and downstream water quality.

3.5 Historic and Cultural Resources

Coventry Woods contains historic resources associated with the region's iron industry, including charcoal hearths distributed throughout the upland forest, as well as structures and landscape features associated with the former Camp Fernbrook property and historic farmsteads.

These resources are vulnerable to vegetation encroachment, erosion, deterioration, unauthorized alteration, and visitor impacts. Inholdings and fragmented ownership patterns further complicate cohesive long-term protection.

Stewardship should focus on protecting and stabilizing these historic and cultural resources, interpreting their significance, and ensuring they remain safe and accessible for appropriate community use.

3.6 Public Use and Safety

3.6.a Recreation/Trails

Trails are essential for stewardship access and recreational use, but they also create ecological and management challenges. Trails can function as corridors for invasive species spread, expand edge conditions, fragment habitat, and concentrate erosion if poorly routed or maintained.

Informal and user-created trails expand soil disturbance, compact soils, crush vegetation, and disrupt wildlife. Compacted soils reduce water and nutrient infiltration, affecting vegetation well beyond the trail footprint.

Trespass and encroachment remain ongoing concerns, particularly within portions of the preserve outside Township property. Encroachment includes unauthorized mowing, dumping, installation of structures or deer stands, and creation of informal access routes. These activities degrade habitat, introduce invasive species, and complicate long-term stewardship.

Management of the trail system and consistent response to encroachment are integral to protecting both natural resources and the visitor experience. Formal trails function as the primary means of directing use and minimizing broader disturbance. Informal and unmanaged trails contribute to erosion, habitat fragmentation, and invasive species spread, and may pose safety risks because they are not formally designed, inspected, or maintained.

3.6.b Hazard Trees

Dead, dying, and structurally compromised trees pose safety risks, particularly in high-use areas, along trails, near access points, and around structures. These risks are increasing as forest health stressors progress.

At the same time, standing and downed dead wood provides important wildlife habitat, adds nutrients to soils, and supports forest structural diversity. Stewardship should focus on removing or managing hazardous trees in heavily used areas, while allowing dead wood to remain in less-used parts of the forest where it benefits wildlife and natural forest health.

3.7 Stewardship Capacity

Stewardship of Township parks, trails, and open space is supported through municipal staff, advisory boards, volunteers, and partners, with Public Works providing core maintenance and targeted stewardship activities.

As the Township's open space system has expanded, stewardship needs can exceed routine maintenance capacity, and the absence of a coordinated, long-term stewardship framework limits the Township's ability to address invasive species, forest health, public safety, and long-term ecological resilience.

See "Stewardship Operations and Capacity" in Appendix A – Open Space Assessment.



Trails and access require ongoing management to limit spread of invasives, control erosion, and protect sensitive vegetation and wildlife habitats.



Dead or dying trees create safety risks in high use areas, while dead wood elsewhere supports wildlife, requiring targeted risk management.

4. Conservation Values, Priorities, and Goals

Coventry Woods is conserved to protect a regionally significant natural and cultural landscape that provides ecological, hydrologic, and public benefits. Stewardship priorities at Coventry Woods focus on maintaining the resources and conditions that most strongly influence the long-term protection of these values.

Stewardship goals define what management at Coventry Woods is working to accomplish. They translate stewardship issues and conservation priorities into clear, action-oriented outcomes that guide decision-making, resource allocation, and management direction across the preserve.

The stewardship goals apply sitewide and establish the foundation for the stewardship strategies and management tasks described in Sections 6 and 7.

The conservation values, stewardship priorities, and goals of Coventry Woods are:

4.1 Forest Health

Conservation Value: Coventry Woods contains one of the largest remaining unbroken forest tracts in southeastern Pennsylvania and contributes meaningful interior forest habitat within the Hopewell Big Woods Conservation Area. The size, continuity, and configuration of the forest support ecological processes, forest interior wildlife, and long-term forest resilience.

Stewardship Priority: Keeping large areas of forest intact, maintaining overall forest health, encouraging the growth of native trees and plants, and supporting a mix of vegetation types and ages.

Goals:

- Employ resource-efficient stewardship practices that protect high-value conservation areas and sustain a large, connected forest landscape.
- Promote greater forest structural diversity and the regeneration of native canopy, understory, shrub, and ground-layer vegetation,
- Coordinate stewardship priorities and activities with adjacent landowners to support forest continuity and resilience.

4.2 Invasive Plants

Conservation Value: Invasive plants represent one of the most significant threats to the ecological integrity of Coventry Woods. Their distribution, density, and pathways of spread influence forest regeneration, habitat quality, and long-term management feasibility.

Stewardship Priority: Limiting further spread of invasive plants and maintaining native plant community structure.

Goals:

- Prevent the spread and reduce the ecological impacts of invasive plant species through long-term, coordinated management.
- Seek early detection and quick response with sustained removal and restoration efforts with native plant communities
- Collaborate with adjacent landowners and inholdings on invasive species management.
- Focus invasive removal efforts along riparian areas, trails, forest edges, and property boundaries where spread is most active.

4.3 Wildlife Habitat and Biodiversity

Conservation Value: Coventry Woods lies within federally and regionally designated important bird and mammal areas that support forest interior birds, wide-ranging mammals, amphibians associated with forested wetlands, and diverse plant communities. The preserve functions as part of a larger ecological network within the Hopewell Big Woods landscape.

Stewardship Priority: Protecting habitat continuity, interior forest conditions, wetlands and vernal pools, and features that support wildlife.

Goals:

- Maintain and enhance habitat conditions that support a diversity of forest interior birds, amphibians, and mammals.
- Emphasize protecting large forest blocks, maintaining the continuity of riparian and wetland corridors, and conserving sensitive habitats such as vernal pools.
- Sustain habitat diversity and ecological connectivity.
- Protect amphibians during seasonal migrations by reducing roadway mortality at the vernal pool crossings.

4.4 Water Resources

Conservation Value: Coventry Woods protects extensive headwaters of Pigeon Creek and Rock Run and supports High Quality and Exceptional Value waters, wetlands, seeps, and floodplain forests. These systems regulate stormwater, sustain aquatic habitat, protect downstream water quality, and support groundwater recharge.

Stewardship Priority: Protecting streams, riparian corridors, floodplains, wetlands, seeps, springs, and vernal pools, as well as the upland areas that drain to and support these systems.

Goals:

- Protect and sustain the headwaters of Pigeon Creek and Rock Run and their associated wetlands, seeps, floodplains, and forested buffers.
- Safeguard water quality by preserving and restoring riparian areas, minimizing erosion and runoff, and stabilizing disturbed areas with native vegetation.
- Focus conservation efforts along stream corridors and wetlands and vernal pools, including uphill areas that drain to them.

4.5 Historic and Cultural Resources

Conservation Value: Charcoal hearths, farm remnants, and former camp features reflect the area's industrial, agricultural, and recreational history and contribute to the cultural and educational value of Coventry Woods.

Stewardship Priority: Protecting historic features, managing vegetation around them, and integrating cultural resources into broader site management.

Goals:

- Protect and preserve historic charcoal hearths, former Fernbrook camp structures, and other cultural features as significant elements of Coventry Woods.
- Integrate historic resource protection into natural resource management, address vegetation and physical threats.
- Support the historic and educational value of these resources.

4.6 Public Use and Safety

Conservation Value: Coventry Woods provides opportunities for low-impact recreation, environmental education, community gatherings, and volunteer stewardship within a protected natural setting. The Fernbrook Access trailhead area serves as the primary activity hub and, together with the trail system and access points, shapes both visitor experience and ecological impacts.

Stewardship Priority: Maintaining recreation facilities, trail network and access, concentrating use in appropriate areas, and promoting environmental education and awareness.

Goals:

- Provide and manage sustainable public access that supports low-impact recreation, stewardship operations, and visitor safety.
- Maintain a safe, clearly defined trail system with improved wayfinding and visible trailheads.
- Reduce trail erosion and remedy surface hazards.
- Prevent trespass and encroachment through education, outreach, and routine monitoring of known problem areas.
- Explore opportunities to expand and enhance the visitor services and experiences it provides to the community.

4.7 Stewardship Capacity

Conservation Value: Long-term protection of Coventry Woods depends on staff capacity, volunteer engagement, partnerships, funding, and stewardship infrastructure.

Stewardship Priority: Building and sustaining the organizational and community resources necessary for ongoing management.

Goals:

- Strengthen and sustain the Township's long-term ability to steward Coventry Woods.
- Build and support volunteer capacity, coordinate partnerships, manage hazard trees in high-use areas to reduce public safety risks and maintenance issues.
- Align staffing, funding, and stewardship activities to support consistent, long-term implementation.

Building on its long-standing commitment to open space preservation, North Coventry Township is well positioned to improve community use while strengthening stewardship, restoring native habitats, protecting wildlife, and ensuring the long-term health of Coventry Woods and other Township-owned open spaces.

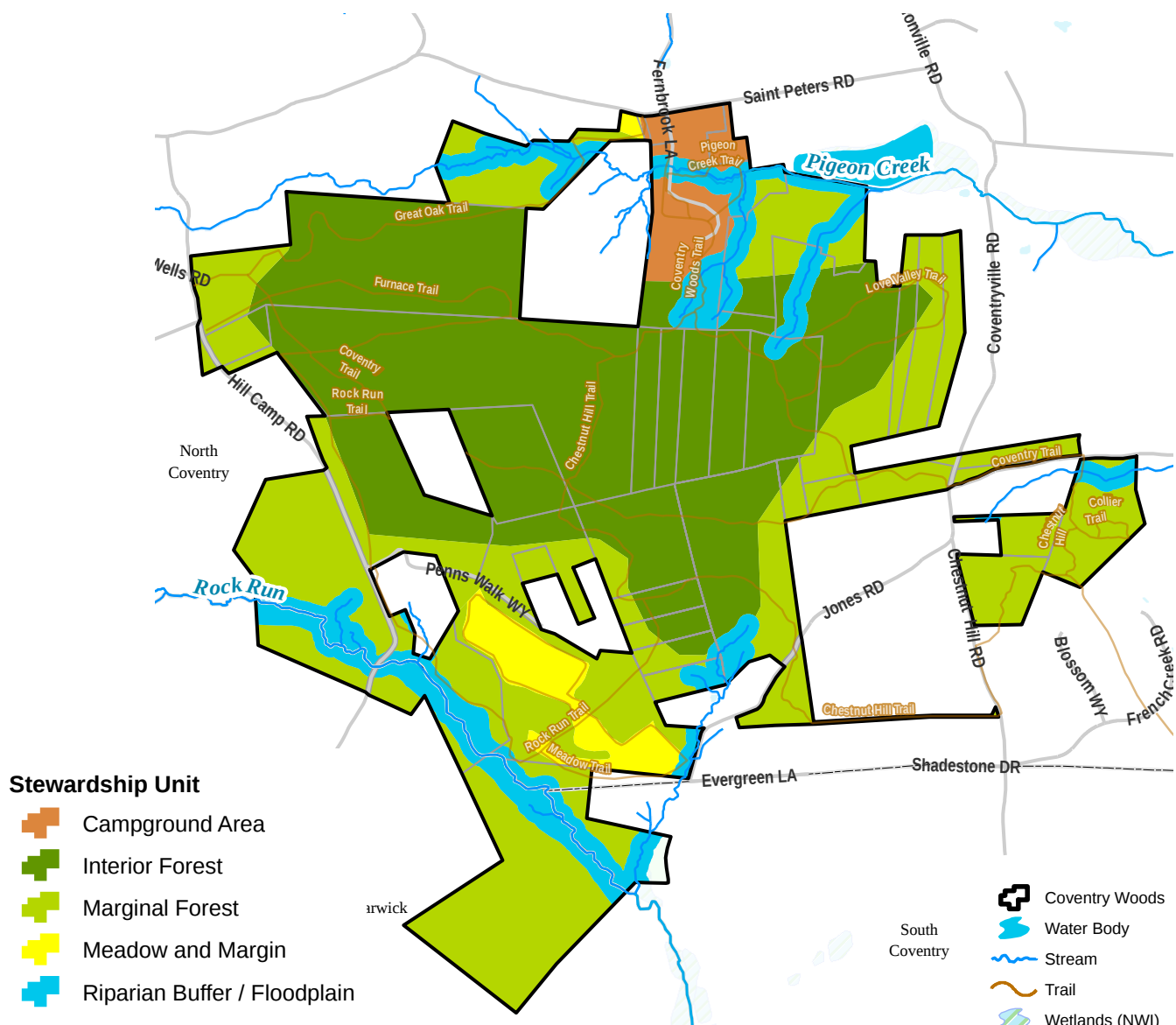
5. Stewardship Units

Coventry Woods has varied forest conditions, hydrology, land use history, and management needs. To support coordinated stewardship, the preserve is organized into stewardship management units that group areas within the preserve with similar stewardship needs and tasks.

Sitewide stewardship goals apply across the preserve but are implemented differently by unit based on existing conditions and management needs. Each unit section describes how the goals are expressed on the landscape and identifies the primary stewardship focus areas guiding management actions.

Stewardship management units are the same as those set forth in the Invasive Plants Management Plan (2023), based on topography, hydrology, and land use/land cover. This approach groups areas of the preserve that share similar ecological characteristics and management needs.

For planning and management purposes, Coventry Woods is organized into the following stewardship units, **Interior Forest** (~300 acres); **Marginal Forest** (~280 acres); **Meadows and Margins** (~23 acres); **Riparian and Floodplain Areas** (~80 acres); **Campground Area** (~22 acres).



6. Stewardship Strategies

This section documents existing conditions, issues, stewardship strategies, and tasks for each stewardship management unit. It serves as the management planning core of the Stewardship Plan, describing how sitewide stewardship direction is applied spatially across Coventry Woods.

The strategies form the basis for the Stewardship Task Schedule in Section 7.

6.1 Sitewide Stewardship Strategies

Deer Management

- Implement and regularly update the Coventry Woods Deer Management Program.
- Seek consultations with the PA Game Commission and DCNR Forester to update management methods.
- Install some areas of deer fence in the places where there will be the most profound beech loss (on north-facing and highly erodible slopes) to allow new tree regeneration.
- Develop a simple Forest/Habitat Management Plan that identifies and informs specific field projects.

Trails

- Strengthen trail wayfinding and edge delineation along formal trails to keep users on designated trails and reduce encroachments in authorized, non-trail areas. Employ low-cost and low-maintenance measures to define formal trail edges, deter access to unwanted informal trails, and direct users to designated routes. Examples include trail markers, signage, wood fencing, logs, or rocks. Reference: USGS's Guidance for Managing Informal Trails provides examples and additional resources. <https://www.americantrails.org/resources/guidance-for-managing-informal-trails>.
- Consider adopting trail design, construction and maintenance standards to ensure minimal disturbance/erosion, and that improve access and wayfinding at trail heads and the trail network.
- Extend the use of stone/wood/rubber water bars and perform annual maintenance to remove silt deposits.
- Enhance means for trail users to report issues such as a tree being down and blocking the trail.

Hazard Tree Program

- Develop a formal hazard tree program to identify, monitor, and manage hazard tree risks. General steps of a program are:
 - Monitor high-use areas such as driveways, parking areas, trails, and property borders with structures at least once a year and after major storm events. Use a certified arborist or trained staff and volunteers to identify hazard trees.
 - Prioritize the most hazardous trees. Work with a qualified contractor to prune or fell the tree.
 - Where pruning is appropriate, leave cut portions of a tree on-site as dead wood.
 - Snags (dead or standing trees) in infrequently used areas are best retained for their wildlife benefits.
 - Where removal of mature canopy trees is necessary, care should be taken to:
 - Minimize disturbance of surrounding soil and natural vegetation, re-seeding with locally appropriate seed mixes.
 - Perform spot-management of invasives in the immediate area.
 - Replant with identical or more appropriate native species.
 - Undertake regular monitoring and invasives management to allow the natural community to re-establish itself.
- Monitor and document the state of invasives at borders before, during, and after operations, and increase management efforts in the areas most at risk.
- Document and catalog all reasonable efforts, before, during, and after operations, to identify and address hazard trees, including monitoring (when, where, and by whom) and actions taken and by whom.
- Reference: Natural Lands Hazard Tree Program serves as a model program. <https://weconservepa.org/wp-content/uploads/2024/08/Hazard-Tree-Program.jpg>

Historic and Cultural Resources

Implement protective measures and maintenance practices to prevent damage to historical structures and charcoal hearths from vegetation, erosion, and visitor impacts; establish signage or barriers where appropriate; and coordinate with the NCT Historical Commission and local historians to document, interpret, and maintain these historic features.

Use interpretive signage to highlight the site's iron-industry, Free Love Valley, Underground Railroad, and camp history, possibly integrating interactive or question-based educational elements.

Outreach and Communication

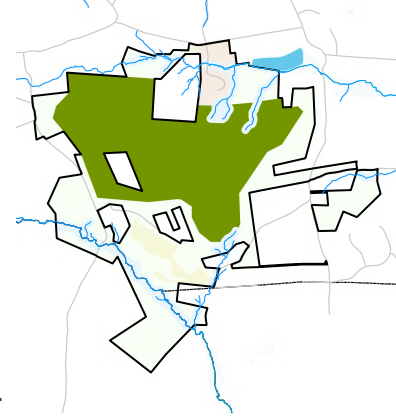
- Provide introductory training for Public Works staff on invasive plant management. Cover plant identification, mowing practices to limit spread, and, advanced instruction on herbicide selection and spot-treatment techniques
- Enhance public education on invasive species stewardship through consistent communication channels, such as social media, signage (potentially as a Scout project), newsletters, Nextdoor, and trailhead kiosks with QR codes linking to resources and volunteer signup.
- Develop greater management cooperation with the adjoining property owners and jurisdictions, including properties in South Coventry and Warwick Townships, regarding encroachment in unauthorized areas, invasive species management, hazard tree removal, and other stewardship best management practices.
- Improve messaging of preserve policies and proper trail etiquette to deter unwanted behavior.
- Establish clear policy guidelines to handle encroachments by communicating with nearby landowners and users, using letters or on-site notices to resolve issues before enforcement becomes necessary.

Volunteerism

- Reinstate and strengthen the Friends of North Coventry Parks as a core volunteer group, equipping them with training, support, and resources to work with Environmental Advisory Committee, North Coventry Open Space Review Board and Parks and Recreation Commission, and others on invasive species removal, native habitat restoration, trail maintenance, park clean-ups, and tree care.
- Consideration could be given to the long- term development of a “Friends” group as a 501c3 non-profit to allow additional funding avenues
- Coordinate with other volunteer trail groups (e.g., Hopewell Big Woods Running Club, Owen J. Roberts Mountain Bike Team) to ensure trail maintenance is timed, coordinated, and conducted in ways that reduce invasive species spread
- **Volunteer Program:** The Schuylkill River Greenway Association program serves as a model for building an organized ambassador and volunteer base that supports trail maintenance, repair, and community engagement. Details include:
 - Trail Ambassadors are trained volunteers who serve as the trail's friendly, visible presence; providing information, promoting safety, and modeling good stewardship. They typically volunteer 8 hours per month (April–October) and receive training, gear, and basic supplies
 - TrailKeepers work under coordinators during scheduled workdays to handle maintenance tasks like pruning, litter removal, and clearing overgrowth.
 - Other volunteers, including civic groups, special project participants, and Adopt- or Sponsor-a-Trail partners, contribute through one-time projects, larger improvements, or ongoing trail maintenance and support
 - Reference: Schuylkill River Greenway Association Volunteer Program serves as a model program. https://schuylkillriver.org/wp-content/uploads/2018/02/Volunteer_Brochure_Low-res.pdf
- **Recruitment:** Identify and implement strategies to recruit and retain volunteers, such as using MailChimp and the Friends of the Park newsletter, posting on social media and community bulletin boards, and expanding the volunteer application and information page on the Township website.

6.2 Interior Forest

300 acres



Existing Conditions

- Interior forests are defined as forested areas with a largely unbroken rest canopy and are greater than 300' from paved roads or forest edges.
- The forest remains largely intact, with invasive plants not yet prevalent due to limited fragmentation.
- This unit is dominated by trees greater than 15' tall with canopy cover exceeding 60%.
- Canopy tree diameters generally range between 10" and 40" DBH.
- The forest composition is primarily dry oak-mixed hardwood, with areas of red oak-mixed hardwood and younger successional stands dominated by tulip poplar.
- This unit provides important habitat for interior forest plants and animals that are less tolerant of human activity and forest-edge conditions.
- The preserve supports a notable abundance of interior forest bird species despite its location near heavily developed areas.
- Seeps, springs, old charcoal hearths, and rock outcroppings provide valuable niche habitats.
- The area is bisected by low-impact trails.
- The area historically contained many chestnut trees. Some relict stump sprouts remain visible along trails.
- Forest regrowth began in the 1880's following the decline of the charcoal industry.
- Beech trees create dense shade. A previous recommendation was to open canopy gaps through selective felling of beech trees to allow oak and hickory regeneration, but ash and beech tree dieback will create these canopy openings.

Issues

- **Sitewide:** Tree dieback is occurring across the site due to beech leaf disease and emerald ash borer.
- **Sitewide:** Tree and shrub regeneration is limited sitewide as a result of excessive deer browsing.
- **Sitewide:** Hazard trees pose safety risks and maintenance issues for trails, parking areas, signage, and utilities.
- Exotic invasive plant species exist, but are not as common as in the marginal forest.
- Invasives are primarily along trail corridors and areas where the canopy has been opened by fallen trees or ash die-back.

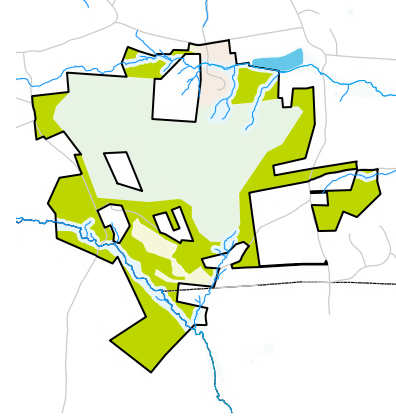
Stewardship Strategies and Management Tasks

The overall strategy is to employ resource-efficient management that prioritizes protecting high-value conservation areas, managing hazard trees, preventing the spread of invasives, and promoting greater forest structural diversity and regeneration of forest understory, shrub, and ground layer vegetation layers.

- Employ professional assessment, flagging, girdling/basal bark application of established invasive trees with semi-annual follow-up treatment.
- Monitor and manage invasives to allow the natural community to re-establish itself
- Hazard tree management is needed at access points and along trails. Develop an adaptive management strategy for ash and beech tree dieback. Consider establishing test plots to test different strategies for forest regeneration, particularly oak trees in areas with dieback, and in places where natural regeneration is not occurring due to deer browse.
- Introduce new chestnut trees in collaboration with the American Chestnut Foundation.
- **Notes:**
 - Seek advice from PA DCNR Bureau of Forestry Service Foresters regarding this adaptive management strategy, forest regeneration, and introducing chestnut trees.
 - See the *Hazard Tree Program under Sitewide Stewardship Strategies*.

6.3 Marginal Forest

280 acres



Existing Conditions

- Marginal forests are defined as forested areas within 300' of roads, forest edges, or structures.
- This unit serves as an important wildlife habitat and buffers from human activity.
- This unit consists primarily of red oak–mixed hardwood and dry oak–mixed hardwood trees, with some tulip poplar trees in younger areas.
- Wildlife tends to be more tolerant of human-related stressors (e.g., noise, light, predation by domestic animals).
- Roads and mowed areas contribute to soil disturbance, light intrusion, and non-native seed dispersal.
- This unit contains most of the heavily used trails and the most disturbance, making this unit the most visible “battleground” for minimizing negative impacts and enhancing the conservation value of the preserve.

Issues

- Sitewide: Tree dieback is occurring across the site due to beech leaf disease and emerald ash borer.
- Sitewide: Tree and shrub regeneration is limited sitewide as a result of excessive deer browsing.
- Deer browsing impacts are greater in this unit than in the Interior Forests, due to easier access and cover.
- Disturbed tree edges, canopy openings, and trail corridors are vulnerable to invasive species spread.
- The impacts of invasives are significant and most heavily along roadways, forest edges near mowed areas, and trail corridors.
- Imported materials such as soil can carry a severe threat through the introduction of invasive plant seeds or rootstock; Japanese hops and purple loosestrife are spreading from such sources near the preserve.
- Yard and garden waste dumped along private property boundaries can spread invasive species.
- Well-established invasive plants with extensive root systems and seed banks will complicate management efforts.

Stewardship Strategies and Management Tasks

Similar to the Interior Forest, but with some notable distinctions, the overall stewardship strategy is to employ resource-efficient management that prioritizes protecting high-value conservation areas, managing hazard trees, preventing the spread of invasives, and promoting greater forest structural diversity and the regeneration of forest understory, shrub, and ground layer vegetation.

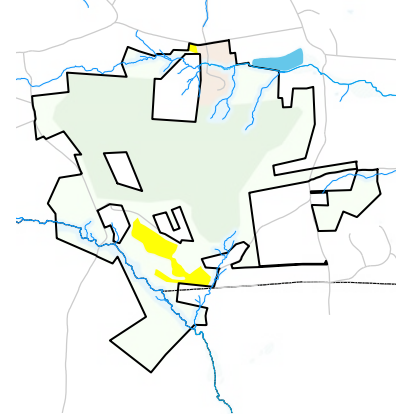
- Perform professional assessment, flagging, girdling/basal bark application of established invasive trees with semi-annual follow-up treatment.
- Hazard tree management is needed at access points and along trails. See the Hazard Tree Program section under Sitewide Stewardship Strategies.
- Increase public awareness and implement targeted outreach, such as workshops, signage, and social media campaigns, that show residents how to identify and remove invasives on their own properties, plant native alternatives, and ensure proper yard waste disposal and soil stockpiles practices. See the Outreach and Communication section under Stewardship Strategies in the Sitewide section.

Notes:

- Maximize tree canopy and minimize the amount of sunlight that reaches regularly traveled areas
- Avoid large-scale removal of invasives that allows penetration of sunlight deeper into forested areas. Instead, large areas should be removed in phases.
- Proactive monitoring and targeted treatment, such as herbicide use on invasive edges, are necessary to prevent invasives from gaining a foothold and degrading the forest’s ecological integrity.
- See the *Hazard Tree Program under Sitewide Stewardship Strategies*.
- See *Deer Management Program under Stewardship Strategies*.

6.4 Meadows & Margins

23 acres



Existing Conditions

- The unit consists of lands that were historically used as hayfields along the southern edge of the preserve, as well as a small field near St. Peters Road.
- Invasives are widespread, especially in field margins and nearby tree canopies.
- Since 2020, some fields have been left uncut, allowing native grasses, herbs, and woody species to begin colonizing.
- Trails and access roads cross the meadows; outer edges are mowed for access.
- Provides important wildlife habitat as natural grasslands and shrublands are declining regionally.
- The Little meadow has more diversity than big meadow and is mowed once a year.
- The Big meadow has lots of invasives and is mowed every 3 years.

Issues

- The meadows are highly vulnerable to invasive species due to sunlight, edge proximity, and past disturbance.
- The interior field areas currently have low invasive impact, likely due to recent cultivation.
- Reed canary grass and other invasives are starting to appear and may need monitoring and management.
- The field margins are heavily impacted with mature invasive species.
- Yard and garden waste that are dumped along private property boundaries can spread invasive species.
- Imported materials such as soil can carry a severe threat of invasive plant seeds or root stock.
- Hedgerow dividing woods from meadow is a seed source for invasives.

Stewardship Strategies and Management Tasks

The overall stewardship strategy is to support year-round native plant, pollinator, and wildlife habitat while strengthening the meadow's resilience to invasive species by prioritizing early detection and consistent management and aligning control efforts with available resources, staff capacity, and site-specific priorities.

Margins:

- Conduct targeted invasive removal along field margins and re-establish perimeter trails through forestry mowing ("brush hog"), trimming of deadfall, and spot herbicide application.
- Implement annual or semi-annual follow-up treatments, combining staff and volunteer efforts, to maintain cleared areas and "beat back" invasives at the meadow margins.

Meadows:

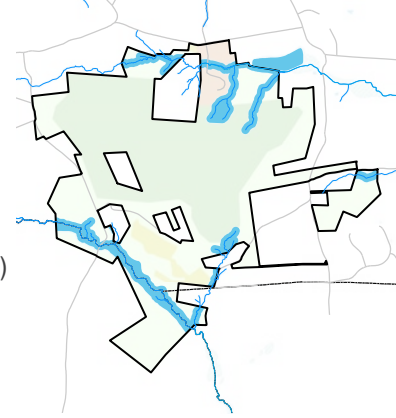
- Conduct targeted invasive plant management with a phenological approach to seed disbursement. Time planned mowing to promote native seed production and inhibit invasive seed production.
- Restore treated areas with native plantings to promote recovery and outcompete invasives, with targeted spot checks for fast-growing invasives, such as multiflora rose.
- Mow the meadow on a rotating cycle that meets best management practices.
- Consider converting the meadow into a native meadow, which includes mowing, herbicide treatment, multiple seeding events, and 3-5 years of follow-up care. This includes mowing of the field margins as described above, and smaller areas.
- Consider piloting a managed grazing program by contracting with a licensed goat-grazing service to control invasive vegetation on township-owned lands. Identify priority sites, coordinate timing and containment with the provider, and evaluate results for cost, effectiveness, and community interest before expanding.

Notes:

- Promote year-round plant diversity by introducing a carefully selected mix of native grasses, wildflowers, and shrubs that bloom and seed at staggered intervals.
- Encourage structural variety with groundcovers, mid-height species, and taller plants to provide a layered habitat.
- Consider a staggered approach, where no more than half of invasives are intensively managed each year.
- Reduce unintentional spread of invasives by removing fallen debris, not mowing around invasive patches, and by avoiding importing contaminated fill materials.

6.5 Riparian Areas

80 acres



Existing Conditions

- These areas are mainly along small streams and seeps tied to the Pigeon Creek (north) and Rock Run (south) watersheds.
- These areas connect all other habitat units, acting as corridors for wildlife as well spreading of invasives.
- Waterways are mostly forested and in natural condition, with minor historic channelization and two small impoundments that impede fish passage.
- Trails and access roads generally avoid streams, using bridges and culverts only where stream crossings are necessary.
- Rock Run Thicket is a dense wetland shrub complex that lies downstream with a significant amount of early successional habitats and seasonal pools, and has potential to support some relatively rare plants and birds.

Issues

- Stream channels show soil erosion from variable water flow, especially during storm events. Stormwater-induced bank erosion may increase future invasive spread.
- Foot traffic near streams and impoundments leads to soil compaction and damage to native vegetation.
- Riparian areas are highly vulnerable to invasives due to seed dispersal by moving water, birds, and mammals.
- Invasives are most concentrated where waterways intersect forest edges and trail corridors
- Rock Run Thicket is severely impacted by thorny invasives like Japanese barberry and multiflora rose, reducing accessibility and habitat quality.
- Stormwater runoff from Hill Camp Road and Jones Road causes localized erosion and sedimentation, though overall impact remains low due to limited impervious surface.

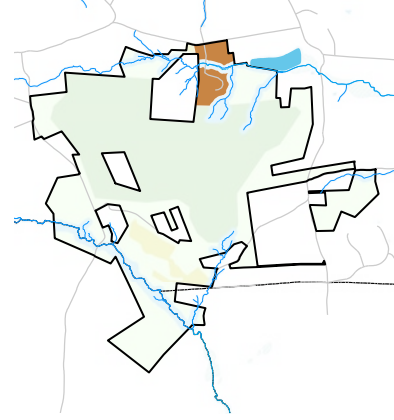
Stewardship Strategies and Management Tasks

The overall stewardship strategy is to focus conservation along stream corridors, wetlands, and vernal pools by maintaining and extending vegetated riparian areas, prioritizing invasive removal to allow native vegetation to thrive, and reducing erosion and runoff to protect water quality.

- Employ intensive management of the “Rock Run Thicket” riparian area to include removal and treatment of the increasingly dominant Japanese barberry and multiflora rose community, and back-plant with native alder, viburnum, and other locally adapted riparian shrub layer, and 3-5 years of follow-up care.
- Use low-impact herbicide by licensed professionals near water where manual removal is not feasible.
- Replant treated areas with fast-growing native shrubs or grasses to prevent regrowth and stabilize soil.
- Plant native shrubs and grasses at known significant erosion sites like Hill Camp Road and Jones Road to stabilize soils.
- Coordinate with the Chester County Water Resources Authority (CCWRA) and Chester County Conservation District (CCCD) on ways to create a 100-foot forested riparian buffer for the protection of stream quality and baseflow
- Consider an amphibian crossing program during peak migration periods that will coordinate with volunteers to assist safe crossings, collect data, monitor outcomes, and evaluate long-term options like underpass tunnels with PennDOT and conservation partners. Focus on the vernal pool crossing at Wells Road near St. Peters Road.
- Evaluate the need for a long-term management strategy for the unmaintained Hill Camp Dam on Rock Run to evaluate its structural condition and hydrological and ecological impacts, and to provide recommendations for stabilization, restoration, or removal.

6.6 Campground Area

22 acres



Existing Conditions

- The former Fernwood Campground area includes buildings, pavilions, parking, and access points along St. Peters Road.
- It functions as the primary entrance and the most visible area for park visitors and Township residents.
- The terrain is largely altered and consists of mowed turf grass, mature landscaping, and specimen trees.
- The area is bisected by Pigeon Creek and includes small tributaries, seeps, and a creek impoundment.
- There are riparian tree plantings along the Pigeon Creek's north bank that were planted by volunteers and are in good condition, but need weeding and care to stay in good condition.
- The southern portion has a mature hardwood forest with native understory.
- Nearly all invasive species found in the preserve are present here.
- The area is used for public events, like the Coventry Woods Festival.
- Being a public area with sensitive habitats provides an opportunity for education but also poses a management challenge to minimize impacts from foot traffic and other disturbances.
- The old swimming pool area has a wetland habitat, though it is filling in with sediment.

Issues

Dense invasive vegetation growth is concentrated along boundaries, forest edges, and trails due to past disturbances and edge conditions.

- Disturbance from structure repairs, soil disruption, and canopy loss creates conditions for invasive spread.
- Mowing practices inadvertently allow invasives to advance, as operators avoid dense patches and fallen trees.
- Visitor use, including heavy traffic and informal trails, spreads invasives and creates unmanaged disturbance.
- Seed dispersal from heavily infested areas (e.g. basketball court) threatens nearby sensitive zones.
- Adjacent residential properties contribute to invasive plant spread through seedbanks, birds, and foot traffic.
- **Sitewide:** Hazard trees pose safety risks and cause maintenance issues for trails, parking areas, signage, and utilities. See the Hazard Tree Program section under Sitewide Stewardship Strategies.
- Historic buildings in this unit need protection and rehabilitation.

Stewardship Strategies and Management Tasks

The overall stewardship strategy is to continue operating the campground area as a hub for education, interpretation, volunteerism, and community gatherings, while addressing structural deterioration, maintaining public safety, replacing invasive plants with native species, and ensuring safe, convenient access to recreation facilities and trails.

- Focus initial efforts on removing invasive plants along field margins and reestablishing perimeter trails through forestry mowing (brush hogging), removal of deadfall, and targeted herbicide application.
- Conduct annual or semi-annual follow-up treatments using a combination of Township staff and volunteers.
- Replant native species where appropriate following invasive plant removal.
- Employ grading standards that minimize erosion and sedimentation along paths, driveways, and parking areas (ex. water bars along trails).
- Hazard tree management is needed near trails, buildings, facilities, and recreational areas.
- Notes:
 - See the *Hazard Tree Program* section under *Sitewide Stewardship Strategies*.
 - See the *Historic and Cultural Resources* section under *Sitewide Stewardship Strategies*.

STEWARDSHIP TASK SCHEDULE



The Stewardship Task Schedule translates the stewardship strategies into a structured, working system for carrying out management actions at Coventry Woods. The **Stewardship Task Schedule in Appendix D** serves as a companion table and organizes stewardship actions derived directly from the sitewide and stewardship-unit strategies.

The Task Schedule groups tasks by stewardship theme and management unit and includes fields to support implementation, including task type, priority level, timing or frequency, season, task lead, partners, estimated cost, funding source, and technical resources and model programs.

The Schedule is intended to support:

- Annual work planning and capital planning
- Coordination among Township departments, boards, partners, and volunteers
- Grant development and reporting
- Documentation of stewardship activities
- Tracking progress and informing adaptive management

While the stewardship goals, conservation values, and management unit framework are intended to remain relatively stable, the Task Schedule is designed to function as a living implementation tool. It may be updated as conditions change, projects are completed, new information becomes available, or management capacity evolves.

Sources:

- Coventry Woods Stewardship Plan, Natural Lands, 2015
- Invasive Plant Management in Coventry Woods, French and Pickering Creeks Conservation Trust, 2023
- “Land For Life” Stewardship Handbook, Natural Lands, 2014
- French Creek Rhoads and Block Final Report



Coventry Woods Stewardship Plan

North Coventry Township
Chester County, PA

June 2026

