



Banffshire Preserve

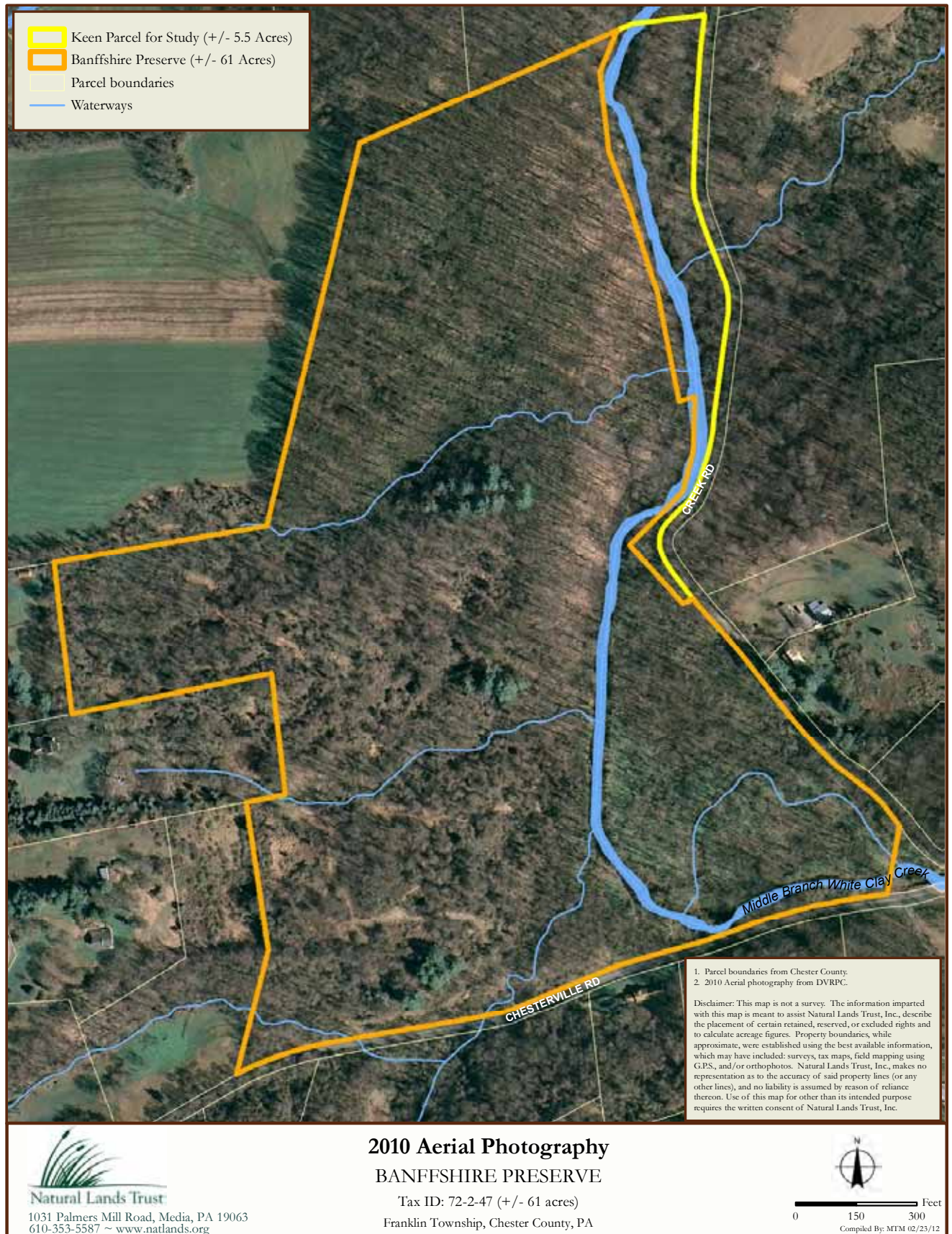
Franklin Township

Natural Areas Stewardship Report

MAY 2012

Franklin Township, Chester County
~61 acres (Tax Parcels 72-2-47)





General Description of Natural Areas

Banffshire Preserve is located on the west side of Creek Road, northwest of its intersection with Chesterville Road in Franklin Township, southern Chester County (see **2010 Aerial Photography**). The Middle Branch White Clay Creek flows north to south through the eastern end of the property. Residential subdivisions lie to the east and west; properties to the south and north remain undeveloped.

David Steckel of Natural Lands Trust (NLT) conducted a field inspection of the approximately 61-acre parcel on February 28, 2012. He was accompanied by three members of the Franklin Township Environmental Advisory Committee—Phil Geogagen, Bob Rector, and Paul Overton. Photographs of the natural features on the Preserve were taken at this time.

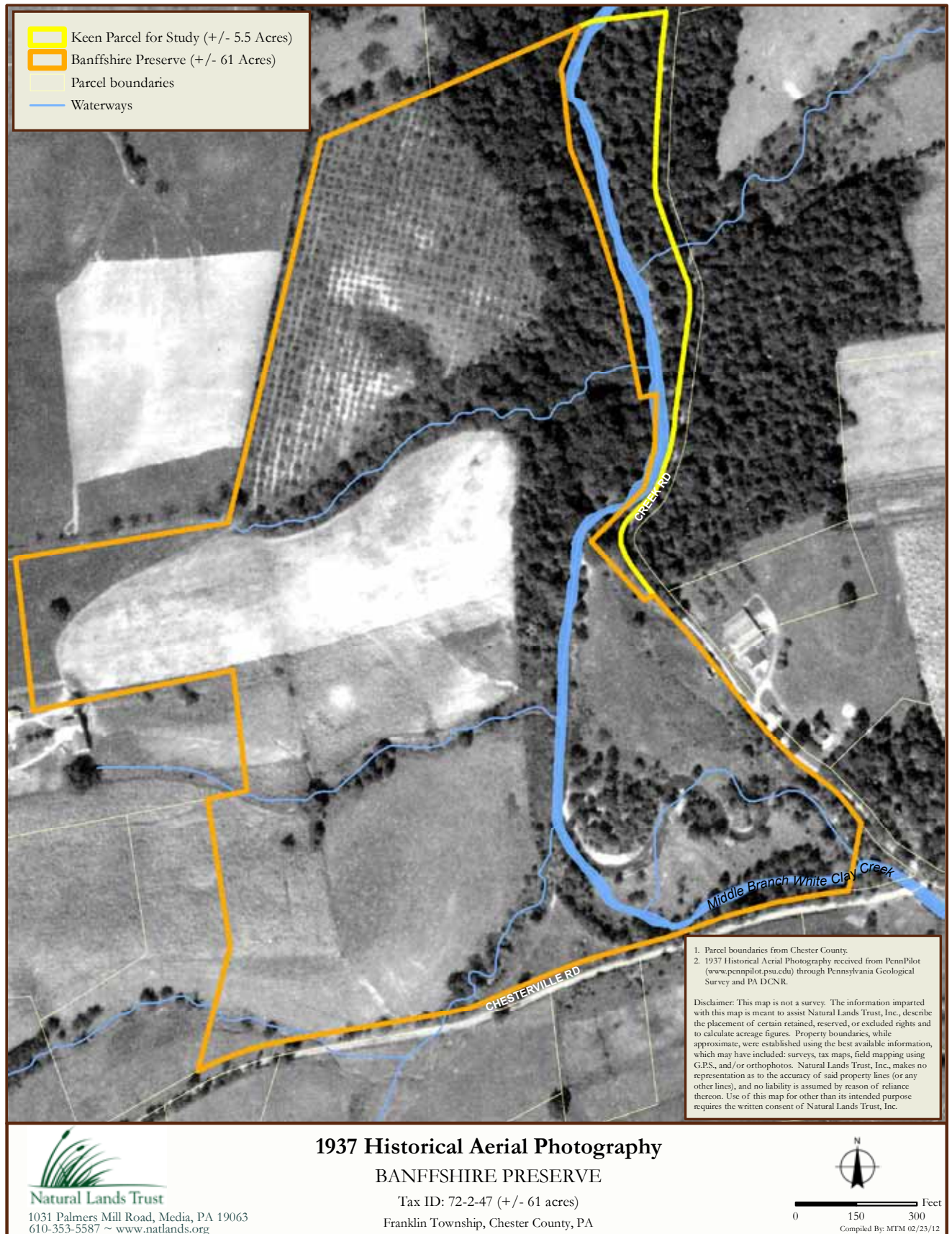
Franklin Township acquired the Preserve in 2008 to provide a natural space with passive recreational

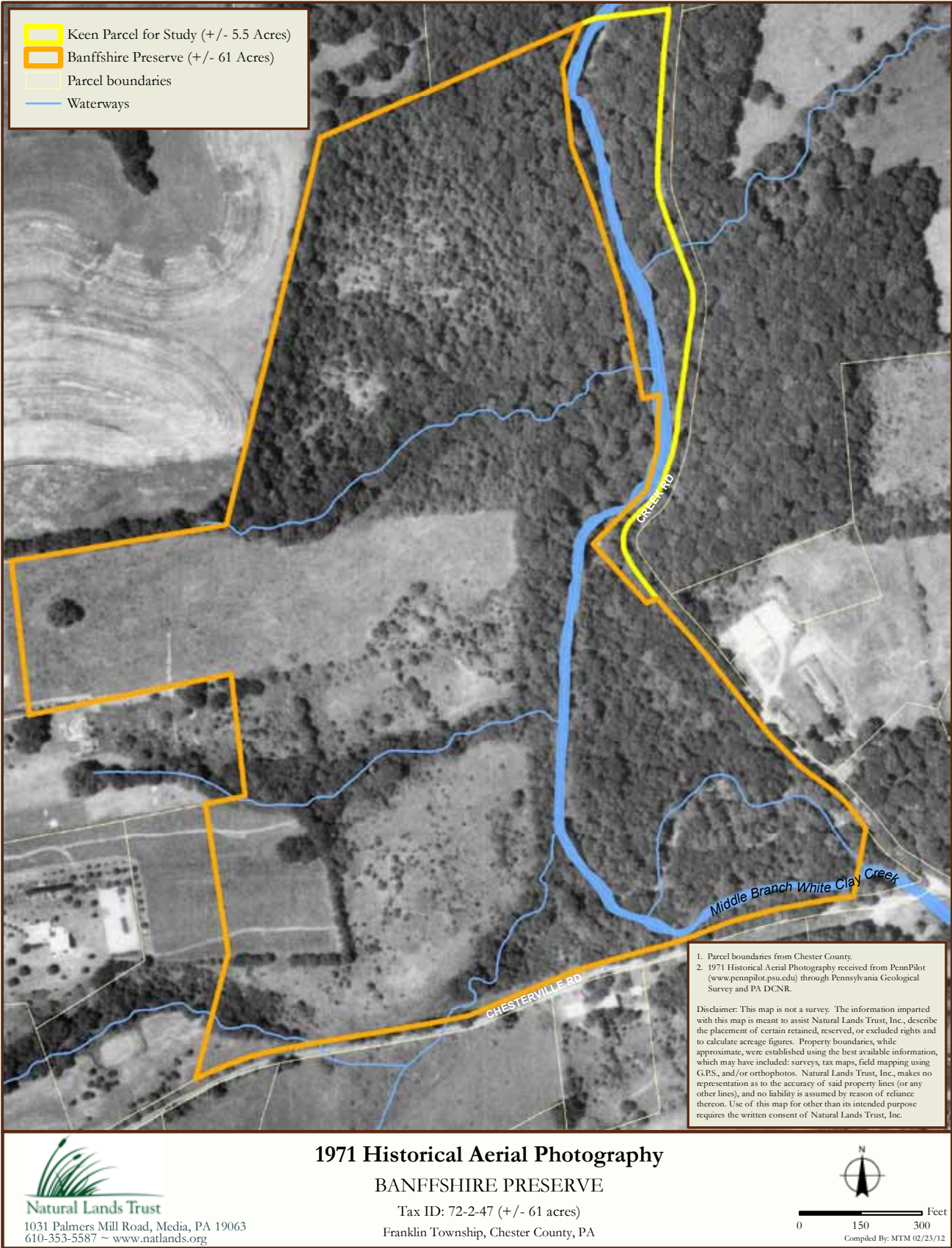
opportunities for township residents. Informal paths (old farm roads, fisher trails) meander through the Preserve. The Township is interested in establishing a formal trail system that will eventually connect to other protected lands nearby. An unimproved parking area for five vehicles rests along Creek Road. The Township would like to improve this area and/or establish a parking area along Chesterville Road. The latter area would allow visitors to access the Preserve without having to walk along the public road or ford the Creek.

The type and quality of plant communities within the Preserve reflect its agricultural history (including pasture, row crop, and orchard) and when different areas were released from agriculture. A mature riparian forest rests on the steeper slopes that border the Creek in the northern part of the Preserve. This marginal land was released first from agriculture and exhibits a closed-canopy forest as early as 1937 (see **Historical Aerial Photography 1937**). Younger stands of various ages developed throughout the past century



Trail in Banffshire Preserve





as different areas were released (see **Historical Aerial Photography 1971**). Today, the preserve contains a mix of terrestrial (upland) and palustrine (wetland) communities. All are more or less impacted by exotic invasive plants and overabundant deer.

The Preserve also contains an abundance of water resources. In addition to the main stem of the Creek, there are three headwater streams and associated springs, and floodplain seeps. The terrain provides visitors a variety of scenic views, from floodplain views of the Creek to hilltop vistas to the north. (see **Environmental Features map**). The diversity

of natural habitats in the Preserve offer many passive recreational and environmental educational opportunities for Township residents.

Water Resources

The Park lies within the White Clay Creek Watershed. The Creek and its unnamed tributaries are classified by the Pennsylvania Department of Environmental Protection as Trout Stocking Fishery, Migratory Fishes¹. After flowing through the Preserve, the Creek intersects with the main branch White Clay Creek approximately three miles south that eventually enters the Delaware River at Wilmington.

Approximately seven acres of the floodplain has been included in the National Wetlands Inventory² (see **Environmental Features map**). Hydric soils³ straddle the headwater stream that flows through the southern end of the property along Chesterville Road. The headwater tributaries and Creek are augmented by forest springs and floodplain seeps.



Headwater stream

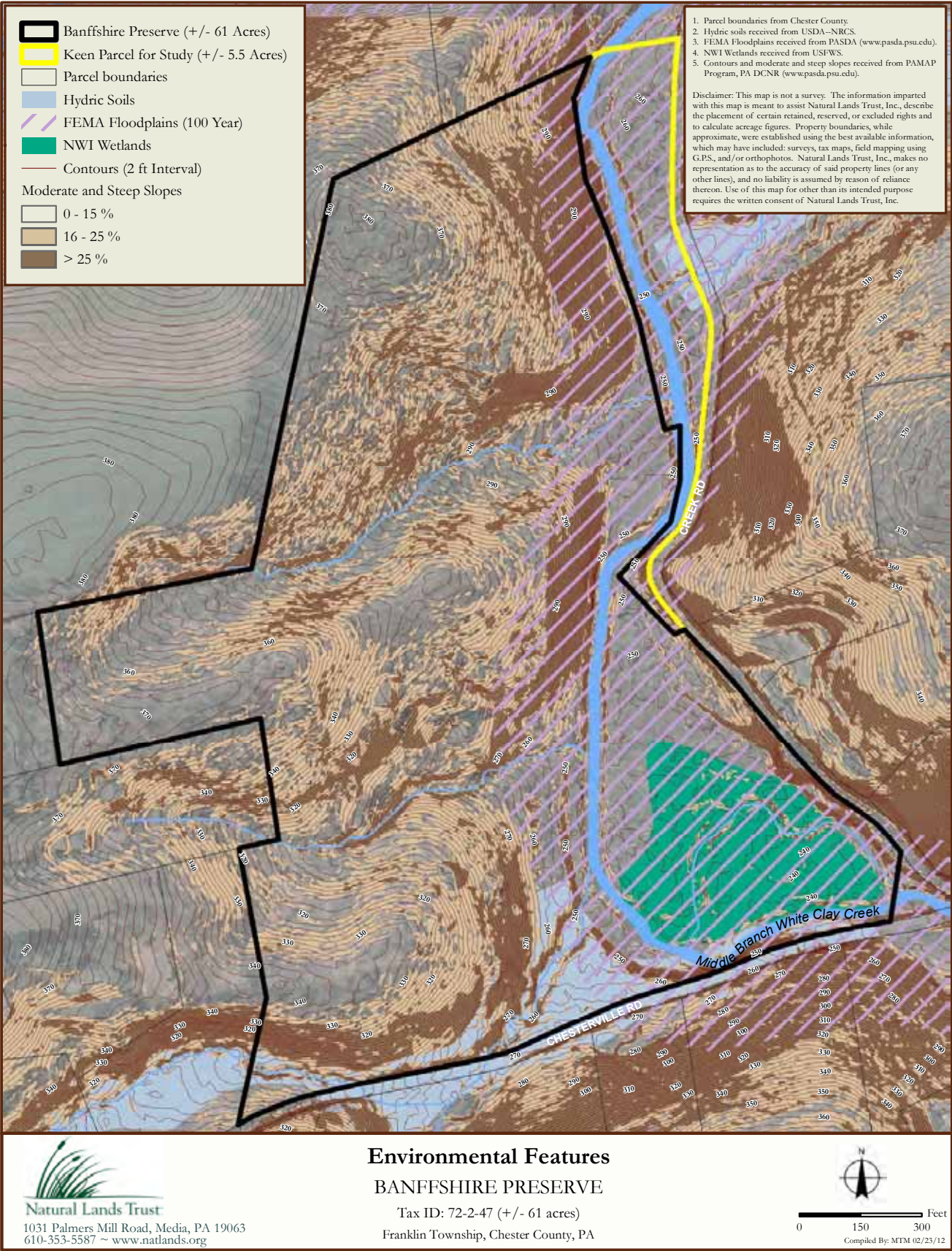


Forest spring

¹ Trout Stocking Fishery means maintenance of stocked trout from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat. Migratory Fishes means the passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which move to or from flowing waters to complete their life cycle in other waters.

² The National Wetlands Inventory, compiled by the US Fish and Wildlife Service, is a comprehensive mapping and inventory of wetlands in the US.

³ Hydric soils are defined by the Natural Resources Conservation Service (NRCS) as “soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.”



Plant Resources

The general plant communities in Banffshire Preserve are described below with invasive species highlighted in **bold** type.

Tuliptree-beech-maple forest

This forest type is expressed in a few ages within the Preserve. The oldest expression (at least 100 years old) is found on the steep slopes on the western side of the Creek (see **Historical Aerial Photography 1937**). An approximately 45-year-old stand now occupies the orchard shown in the 1937 aerial. The remainder of the old agricultural fields (southwest section of Preserve) began to be released in the

early 1970s and is currently a mix of tuliptree-mixed hardwood forest and woodland⁴, with many large and small gaps dominated by shrubs and vines.

Tuliptree (*Liriodendron tulipifera*) and beech (*Fagus grandifolia*) are canopy dominants of the oldest forest stand. Several patches of large red oaks (*Quercus rubra*) are scattered through this stand. Additional canopy species include mockernut hickory (*Carya tomentosa*) and pignut hickory (*C. glabra*). The understory contains beech, sugar maple (*Acer saccharum*), red maple (*A. rubrum*), **Norway maple** (*A. platanoides*), black-gum (*Nyssa sylvatica*), and hornbeam (*Carpinus caroliniana*). The shrub layer is primarily spicebush (*Lindera benzoin*) and **multiflora rose** (*Rosa multiflora*).



Mature tuliptree-beech-maple forest

⁴ Woodlands have 10–60% tree canopy closure; forests have >60% canopy closure.

Several skunk cabbage (*Symplocarpus foetidus*) seeps associated with the headwater streams are found on the lower slopes of the forest.

The canopy of the maturing forest occupying the old orchard site is primarily tuliptree. Additional canopy species include ash (*Fraxinus* sp.), black cherry (*Prunus serotina*), and remnants of an old white pine (*Pinus strobus*) plantation. The moderately dense shrub layer contains **multiflora rose**, spicebush, and **autumn-olive** (*Eleagnus umbellata*); **oriental bittersweet** (*Celastrus orbiculatus*), **Japanese honeysuckle** (*Lonicera japonica*), and **grape** (*Vitis* spp.) vines are compromising canopy and understory trees and shrubs.

The young tuliptree-mixed hardwood forest/ woodland stands vary in proportion of tuliptree dominance. The forest stands are primarily tuliptree, with some black cherry, ash, and red maple. In the more open woodland areas, there is a more equal mix of these species and the addition of black walnut. Additional species include osage orange (*Maclura pomifera*), Norway spruce (*Picea abies*), and paulownia (*Paulownia tomentosa*). The gaps in the woodland areas are densely covered in brambles (*Rubus* spp.), **multiflora rose**, spicebush, and **autumn-olive**. The trees and shrubs are highly impacted by invasive vines including **oriental bittersweet**, **grape**, **Japanese honeysuckle**, and **mile-a-minute weed** (*Persicaria perfoliata*).



Patch of large red oaks in mature forest



Maturing tuliptree-beech-maple forest



Floodplain skunk cabbage seep



Young tuliptree-mixed hardwood forest



Young tuliptree-mixed hardwood woodland



Sycamore-black walnut palustrine forest

Sycamore–black walnut palustrine forest

A sycamore–black walnut palustrine forest covers the floodplain in the southeast corner of the Preserve. American sycamore (*Platanus occidentalis*) and black walnut (*Juglans nigra*) are dominant canopy trees. Subordinate species include box-elder (*Acer negundo*) and ash (*Fraxinus* sp.). Understory species include box-elder and **Norway maple**. Spicebush, **multiflora rose** and **Japanese honeysuckle** dominate the shrub layer. The floodplain harbors scattered skunk cabbage seeps.

Red Maple Palustrine Forest

A small area of young red maple palustrine forest lies along Chesterville Road. This forest is dominated by red maple (*A. rubrum*). The shrub layer contains **multiflora rose**, spicebush, **autumn-olive**, and black-haw (*Viburnum prunifolium*).

Terrestrial Meadow

A small terrestrial meadow rests on a hilltop in the southwest corner of the Preserve. The meadow is dominated by grasses, milkweed (*Asclepias* sp.), and **Japanese honeysuckle**. The meadow is ringed by **autumn-olive**.

Current Use and Stewardship

The Banffshire Preserve was created to provide public open space for residents of Franklin Township and to showcase and preserve the site's natural resources for the benefit of local and downstream communities. Conservation priorities for the Park include:

1. improving native habitats,
2. maintaining the water quality of White Clay Creek,
3. formalizing a trail system with links to surrounding properties, and
4. enhancing environmental education opportunities.

Stewardship Issues, Opportunities and Recommendations

The following stewardship issues and opportunities were observed during the February 28, 2012 site visit. They are described in the context of the overall stewardship goal to protect and enhance the site's natural resources. We provide a description of the stewardship issues and opportunities for the site that are followed by general recommendations to address the issue or fulfill the opportunity. At the end of this report, we include a list of potential funding sources for recommended stewardship initiatives in the Park.



Red Maple Palustrine Forest



Terrestrial Meadow

Invasive Plants

A ubiquitous problem encountered in the stewardship of natural lands in southeastern Pennsylvania—and increasingly recognized as a threat worldwide—is the presence of invasive plant species. An invasive species is one that rapidly spreads and outcompetes multiple native species, chiefly because of the absence of predators, pathogens, and herbivores that keep it in check in its native range. Most invasive plants are particularly well adapted to colonize disturbed areas. In southeastern Pennsylvania, disturbance from human activities, particularly sprawl, coupled with the rich horticultural history of the southeastern counties, has afforded numerous invasive species the opportunity to become well established throughout the region. Even though the occasional immigration

of new species into plant communities is a normal process, the current high rate of introduction—fueled by the planting of exotic (non-native) species for horticulture, wildlife management, and erosion control—is threatening the integrity of native plant communities and lowering native biodiversity. Not only do invasive plants alter the makeup of the plant communities on a site, but they also may affect soil chemistry and hydrology and are usually less beneficial to wildlife than the native plants they replace, contributing further to the loss of biodiversity.

The natural communities in Banffshire Preserve share this regional issue. In general, the younger forest and woodlands areas are moderately to severely impacted; the mature forest is lightly impacted due to its closed canopy during the time most invasives were introduced. Currently, the greatest problem is invasive vines—**oriental bittersweet**, **grape**, **Japanese honeysuckle**—that are climbing canopy and understory trees and shrubs in the maturing and young forest and woodland areas. Other bad actors, in degree of concern are invasive tree such as **Norway maple** and **garlic mustard (*Alliaria petiolata*)** in the mature forest stands and invasive shrubs (**autumn-olive**, **shrub honeysuckle**) in the young forest and woodland areas. The only bright note is that rose rosette disease is present on the Preserve and is starting to kill the **multiflora rose**.

Since the diversity of native species in the Preserve is vital to providing suitable habitat for resident and migratory wildlife, protecting the Preserve's natural heritage, and ensuring an enjoyable environment for community residents, we suggest several general strategies and specific measures to control invasive plant species on the site. In general, it is best to address invasive plant control with a *top-down* (starting in the forest canopy and working down through understory, shrub, and groundcover layers), *least-first strategy* (starting in the least impacted areas).

When considering invasive plant management, it is important to keep in mind that *effective control of invasive plants, especially in the understory, shrub, and groundcover layers of the forest, will only be possible if implemented in conjunction with a deer management program* (see “Forest Sustainability” section below). It is also important to note that the extensive edge



Vines climbing edge tree

area and seed sources in the region and the prolific nature of these plants guarantee that even with complete eradication in Banffshire Preserve, invasive species can quickly reestablish themselves as a serious stewardship problem if not monitored and addressed on a regular basis.

RECOMMENDATIONS

The following invasive control recommendations for the Preserve are presented in general order of priority. The “Invasive Vegetation Management” section of Natural Lands Trust’s *Stewardship Handbook for Natural Lands in Southeastern Pennsylvania* (2008) also provides general guidelines for monitoring and controlling invasive plants typical of the southeastern Pennsylvania landscape.

Any volunteer or contractor used for invasive plant control should be able to distinguish native species from invasive species (e.g., **Norway maple** from native maples). In sensitive wetland areas in the Preserve (the floodplain forest, headwater streams, springs, seeps), only herbicides approved for aquatic use (e.g., Rodeo) should be applied.

- Cut vines that are climbing into canopy trees in the forest. All **oriental bittersweet** vines should be cut and the cut stump treated with a systemic herbicide, if possible. Because the native grape vine is beneficial for native wildlife, only cut grape vines that are climbing into the canopy of the forests and compromising the structural integrity of native trees. Cut stumps of grape vines can be left to resprout. Care should be taken not to cut any Virginia creeper or poison ivy vines that occur in the forests (unless the poison ivy impacts areas of high public use). These are native species that benefit wildlife and rarely become large enough to compromise canopy trees. Control **Japanese honeysuckle** using a foliar treatment of glyphosate herbicide. This is particularly effective on warm days in the late fall and winter months when the leaves of this species remain green and nearby native (non-target) species are dormant and will not be affected by the treatment.
- Control **garlic mustard** in the mature forest. This is best done in early spring when the plant is in flower. Plants should be pulled, bagged and



Vines covering trees in young woodland



Norway maple on edge of mature forest

removed from the site. This is a great activity for volunteers of all ages.

- Manage **Norway maple** with a basal bark application of triclopyr ester (e.g., Garlon 4) herbicide and basal oil. We recommend using a 20–30% mix of triclopyr in basal oil applied in a band around the base of the trunk, avoiding runoff. Depending on the season, it may take time for this treatment to work; for example, a winter application may result in leaf out in spring, followed by defoliation. Once the trees are dead, they can be cut down (if they create a potential hazard for visitors) without stimulating suckering or left as snags for wildlife habitat.
- Manage **autumn-olive** and **shrub honeysuckle** in the forest, woodland, and meadow by cutting to the stump and applying a glyphosate herbicide to the cut stump. Alternatively, after cutting, the shrub can be left to resprout and the young foliage treated with a glyphosate herbicide. In areas near water resources, a glyphosate herbicide (e.g., Rodeo) suitable for wetland habitats should be used.

The management of **multiflora rose** throughout the property can be a lower priority because this species is already being weakened by the rose rosette disease.

- In gaps where invasive shrubs have been removed, replant with native species to improve wildlife value and protect exposed slopes from erosion. It is best to stage the removal of tree and shrub invasives over several years to spread out costs and to maintain nesting sites for resident and migratory birds until native replacements are established. The “Native Plant Materials” section of Natural Lands Trust’s *Stewardship Handbook for Natural Lands in Southeastern Pennsylvania* (2008) also provides a list of native species that are appropriate for the natural areas in the preserve.

New plantings should be monitored for deer browsing. If needed, protect newly planted trees from deer browse using tree shelters for plants less than 6 feet in height. For trees over 6 feet in height, tree wraps limit damage from buck rubbing. Newly planted shrubs should be protected with wire fencing.

Forest Sustainability

Deer overabundance is a problem that affects most natural areas in our region. The habitat value of forests is greatest where there is an extensive unbroken canopy of mature trees with a diversity of native understory species that includes tree, shrubs, and herbaceous plants. Deer impact forest health by consuming seeds (particularly acorns) and browsing on seedlings, shrubs, and herbaceous plants. As deer population density increases, this activity can adversely affect populations of other wildlife species, especially songbirds, through a decrease in plant species and structural diversity within the forest.

The recommended deer density to allow for adequate tree regeneration is 20 deer per forested square mile (one deer per 32 acres). However, to perpetuate a healthy native forest with a diversity of native shrubs and wildflowers, the recommended deer density is 10 deer per forested square mile (one deer per 64 acres). With approximately 60 acres of forest, Banffshire Preserve can support one deer at the recommended 10 deer per square mile density. Several deer were sighted during our brief site visit.

Another method for determining level of deer impact that is gaining favor with natural resource professionals (gathering accurate, useful deer density information is often complicated and expensive) is the condition of forest vegetation. A healthy mature forest has structural diversity with well developed herb, shrub, understory, and canopy layers that create a dense curtain of foliage during the growing season. There should be abundant natural regeneration (seedlings and saplings), particularly in forest gaps.

The mature forest at Banffshire shows good structural and species diversity at this time. However, deer impacts are also visible, including browsed shrubs and seedlings, and, most importantly, a lack of sufficient tree seedlings and saplings to replace current canopy trees.

RECOMMENDATIONS

- Closely monitor the mature forest for deer browsing. Telltale evidence includes “pruned shrubs,” a shrub layer tending toward a spicebush monoculture, a more open understory and the lack of tree seedlings in forest gaps, which should be

dense patches of seedlings or young trees due to the abundance of sunlight.

- Consider implementing a deer management program now to at least maintain the current condition.
- Monitoring the effects of deer browsing and educating the public about the effects of overabundant deer will be critical to the success of any future deer management program in the Township. One option to visually demonstrate and monitor the impact of deer browsing is the installation of small (10 meters square) exclosures. The growth of vegetation within these exclosures is often dramatically different than in surrounding areas with unrestricted access by deer. Ideally, exclosures (with accompanying interpretive signage to educate the public about the importance of reducing the deer population to maintain forest health) should be erected in forested areas on relatively flat ground and near public trails. The setup and monitoring of deer exclosures is a valuable educational exercise that could be undertaken by local schools and colleges.

Water Quality and Ecology

The almost complete tree and shrub cover of the Preserve helps protect water quality by stabilizing streambanks and maximizing infiltration and groundwater recharge that feeds the headwater seeps, springs, and streams. It also benefits the aquatic ecology by shading the waterways and adding organic matter (leaves, branches) that provide structure and nutrients for aquatic organisms. Preserving this cover by addressing the issues above will maintain these benefits.

One potential impact on water quality is soil erosion from trails. It will be important to properly lay out the formal trail system before public use increases. Although parts of the old farm roads (current trail system) could be included in the eventual trail system, some sections will need to be abandoned because they run directly up slope.

RECOMMENDATIONS

- Maintain forest cover by addressing invasive plants and overabundant deer.



Browsed beech sprout in the mature forest



Current trail running directly up slope

- Enhance the forested riparian buffer along the headwater streams and Middle Branch White Clay Creek by planting any gaps in the forest within at least 75 feet of the stream corridors.
- Establish formal trail system, using cross slope routes and switchbacks to minimize stormwater surface flows.

Native Meadow Reclamation

The small terrestrial meadow in the Preserve provides a sunny break for trail users and a good opportunity to establish and showcase a native meadow. Native meadows are characterized by a diverse structure and composition of short and tall grasses and native wildflowers that provide feeding and nesting habitat for declining grassland birds (Eastern Meadowlark, Bobolink) and small mammals, as well as nectar sources for numerous butterflies and other insects.

Native meadow species are naturally adapted to the soils and climate of our region and can, if necessary, survive in drought conditions without irrigation. Once established, native meadows require just one mowing each year to limit encroachment by woody species. Occasional spot herbicide treatments are also necessary to manage invasive species such as **Canada thistle**.

Although the meadow at Banffshire Preserve is not large enough to support grassland birds, it

could showcase native meadow plants, support native pollinators, and diversify the educational and recreational benefits of the property.

RECOMMENDATIONS

- Encourage native meadow species and enhance wildlife habitat value in the meadow by mowing on a once-yearly schedule in March. Mowing at this time of year minimizes impact on the nesting and foraging activities of native wildlife (birds, small mammals, butterflies) and often allows for easy equipment access if the ground is still frozen. An additional mowing in July would provide more growing space for warm-season grasses in the early years of a native meadow conversion.
- Monitor the newly-managed meadow for several years and catalog changes in species composition. If, after that time, most of the species are native, continue to mow annually and add wildflower plugs to enhance native species composition, if desired. If most of the species are invasive or otherwise undesirable, consider eliminating the existing vegetation using herbicides and replanting with native meadow species. Under this second alternative, the meadow can be seeded with desirable species using a no-till drill once the existing vegetation is eliminated. For more information about establishing native meadows, see the “Meadow Management” section of Natural Lands Trust’s *Stewardship Handbook for Natural Lands in Southeastern Pennsylvania* (2008).
- Control **autumn-olive** along the meadow edge per recommendations under Invasive Plants above.

Wildlife Enhancement

Additional opportunities for enhancing wildlife habitat in Banffshire Preserve are described below.

RECOMMENDATIONS

- Leave dead down wood within the forest stands as it serves as the base of the forest food web and a nutrient reservoir for living trees. Dead standing trees (snags) should also be left if they are located in areas that are not heavily used by the public. Snags benefit wildlife by providing cavities and



Down wood in around forest spring

loose bark for nesting and shelter, perching sites, and decaying wood for numerous insects that provide food for woodpeckers and nuthatches. See the attached article “Critter Condos – Managing Dead Wood for Wildlife” for more information.

- Consider installing nesting boxes for eastern bluebirds in the terrestrial meadow. See “Artificial Nesting Structures” (attached) published by the Natural Resources Conservation Service and the Wildlife Habitat Council.

Passive Recreation

The Preserve could provide passive recreation opportunities for township residents and visitors via a formal trail system. Currently, the old farm roads are serving as a temporary trail that passes through the upland plant communities on the west side of the Creek. Intermittent trails created by fishers are also present on the floodplain. The Township envisions the Preserve as a link in a larger trail system that connects protected lands along the Creek (see **Location Map**).

In addition to the layout of the formal trail, the Township needs to determine the best location for a small public parking area. Informal parking for about five vehicles is now available along Creek Road. This area could probably be improved as the formal parking area, however, it lies on the east side of the Creek and would require a quarter mile walk along Chesterville Road to access the current trail entrance. Unfortunately, creating a parking area along Chesterville Road is constrained by steep slopes and hydric soils (see **Environmental Features Map**).

RECOMMENDATIONS

- Develop a trail system that traverses the Preserve west of the Creek. The trail should run through the major plant communities and capture scenic views from the northwest corner and views of the Creek. As mentioned above, parts of the current trail could be incorporated into a permanent trail, but some sections (those running directly up slope) should be abandoned to prevent soil erosion. The future trail should also be designed to preserve a buffer between it and water resources (streams, seeps), avoid known populations of species of special concern, and offer users a variety of views.

- Conduct an engineering study to determine if sufficient area exists to establish a parking area along Chesterville Road given slope and soil constraints.
- Install other visitor amenities as resources allow, such as interpretive signs and benches.
- Continue efforts to connect the Preserve to other protected lands nearby.

Hazards

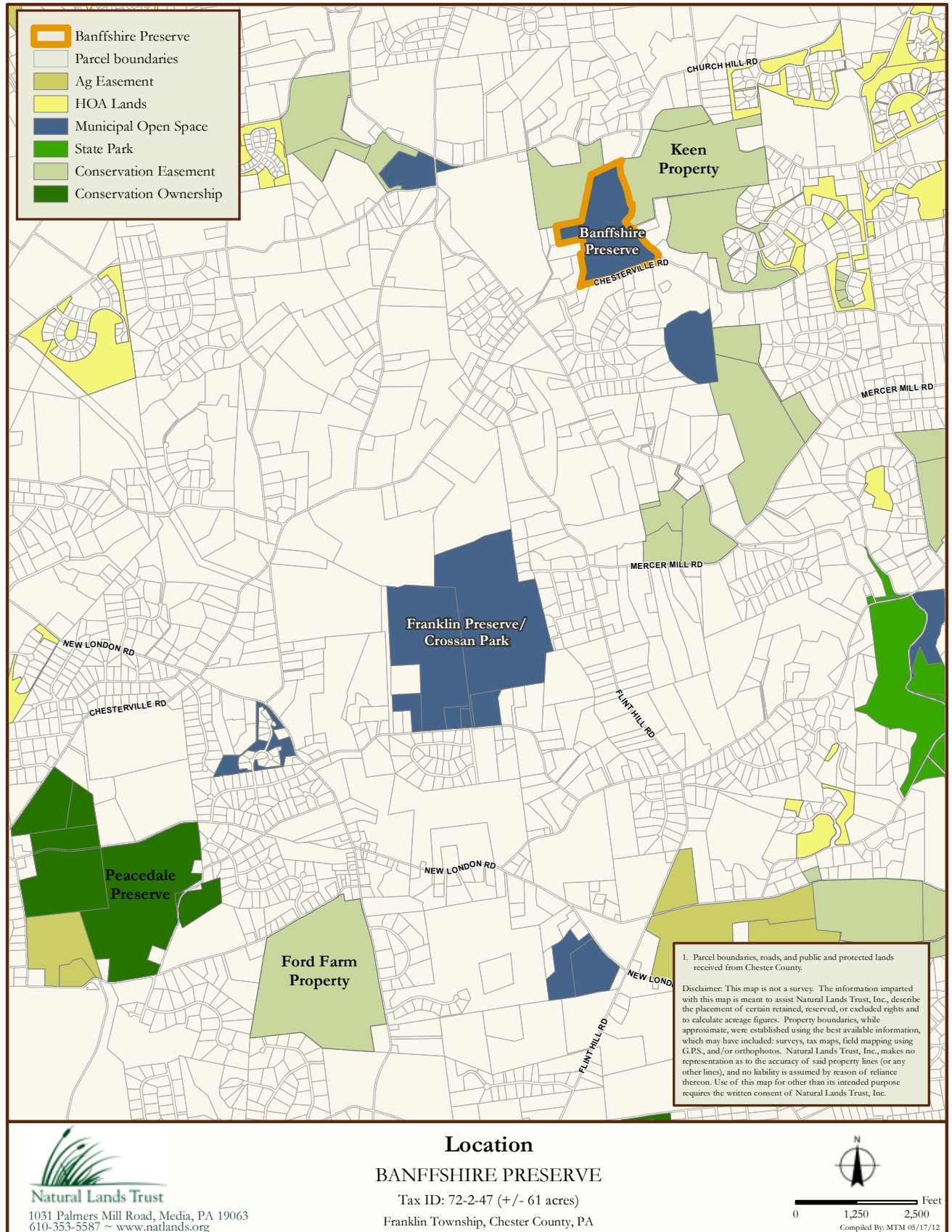
There is a potential for hazard trees (trees that due to structural defects could fall in part or whole on a “target” such as a road, adjacent residential property, or person) along the bordering public roads. This issue is best addressed through a hazard tree monitoring program that regularly inspects for potential hazard trees and addresses them (pruned or removed) as needed.

RECOMMENDATION

- Monitor potential hazard tree areas along public roads and trails (places such as benches or interpretive signs where people may linger) by foot once each year and following severe storms and address potential hazard trees (pruned or removed) as needed. Ideally, a certified arborist should be hired to complete this task and



Trees along Chesterville Road



address any identified hazards through pruning or removal. See the “Hazard Tree Monitoring Program” section of Natural Lands Trust’s *Stewardship Handbook for Natural Lands in Southeastern Pennsylvania* (2008) for information about procedures for hazard tree monitoring. In addition, Morris Arboretum in Philadelphia offers courses on identifying hazard trees.

Boundaries and Aesthetics

Open space parcels are often subject to unwarranted (and frequently unintentional) use (encroachment of landscaped area, dumping yard waste, wood cutting) by neighbors due to poorly marked boundaries. Although we did not encounter any unwarranted use at this time, the boundaries should be property marked and monitored to prevent future occurrences.

RECOMMENDATION

- The boundaries of the Preserve should be surveyed and posted to prevent encroachment issues by neighbors. Signs could be small (3 ¾" x 3 ¾", 0.12 gauge aluminum diamond shape signs can be purchased through vendors such as Voss signs: www.vosssigns.com) and should indicate Township ownership. Posting every 50–100 feet is adequate and particularly important where the Preserve abuts private land.

Environmental Education and Volunteers

Banffshire Preserve provides a venue to educate the public about the many benefits of a healthy ecosystem. Targeting neighbors, the local school district, and community organizations in outreach and volunteer opportunities may encourage landowners to address stewardship issues on their own properties and educators to use the Preserve for field trips. Facilitating responsible use of the Preserve will have the added benefit of discouraging unwarranted use.

RECOMMENDATIONS

- Consider installing interpretive signs in areas where the ongoing restoration of native habitats (e.g., invasive plant treatment and replanting, deer exclosures) is visible to the public. It is important to keep the public informed of changes that are occurring in natural habitats and how restoration will benefit both wildlife and people. Signs could also educate the public about natural habitats (e.g., headwater streams, the mature tuliptree-beech-maple forest) and the importance and benefits of using native species in the Preserve and home landscaping.
- Encourage local schools, environmental groups, birding, and butterfly groups to schedule nature walks in the Preserve
- Invite neighbors, community residents, and local scout troops to participate in natural areas stewardship projects. Establish a “Friends of Banffshire Preserve” volunteer group to assist with several projects recommended in this report, including:
 - Planting forest gaps and monitoring newly planted trees and shrubs
 - Installing deer exclosures
 - Monitoring and cutting invasive vines from trees
 - Pulling garlic mustard
 - Maintaining trails
 - Monitoring Preserve boundaries
- Schedule “workdays” on environmentally friendly “holidays” such as Earth Day or Arbor Day.

Potential Funding Sources for Stewardship Projects in Franklin Township

POTENTIAL FUNDER	PROGRAM
PA Department of Conservation and Natural Resources (DCNR) <i>Contacts:</i> Carolyn Wallis 215-560-1182 Fran Rubert 215-560-1183	<i>Community Conservation Partnership Program</i>
	<i>PA Recreational Trails Program</i>
PA Department of Environmental Protection (DEP)	<i>Environmental Education Grants Program</i>
	<i>Growing Greener Watershed Grants</i>
	<i>Nonpoint Source Implementation Program (Section 319)</i>
PECO <i>Contact:</i> Holly Harper, Green Region Program Administrator 610-353-5587	<i>Green Region Open Space Program</i>
Local Corporations	<i>Corporate Charitable Giving Programs</i>
	<i>Employee Volunteer Programs</i>
E. Kneale Dockstader Foundation	



Hildacy Farm ~ 1031 Palmers Mill Road ~ Media, PA 19063
 610-353-5587 ~ www.natlands.org

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 from the E. Kneale Dockstader Foundation*