

WOODLAND PROTECTIONS

TECHNICAL BULLETIN

Through the Pennsylvania Municipalities Code (MPC), Act 247 Sections 605 and 503(2)(v), municipalities are encouraged to regulate the land near watercourses in their Township Zoning Ordinance and Subdivision and Land Development Ordinance (SLDO).

Woodlands act to reduce flooding, absorbing water during intense precipitation, help filter pollutants prior to them entering watercourses and sequester carbon from the atmosphere, mitigating the impacts of climate change. Woodland protection is primarily governed by a municipal zoning ordinance, which remains in effect continuously—not solely during development activities. Resource protection measures may impose restrictions on land use or prohibit certain activities altogether and often include limits on disturbance and specific performance standards. One straightforward method for incorporating these regulations into a zoning ordinance is to set maximum disturbance thresholds based on woodland type—for example, 20% for general woodlands and 10% for interior woodlands. To encourage compliance, municipalities might consider adding provisions that require woodland replacement when these disturbance limits are exceeded, as an incentive. Where replacement onsite is not possible, a fee-in-lieu of replacement provides funds for tree plantings elsewhere in the municipality.

BENEFITS

- **Fosters Cooperation:** Ordinances inform property owners and developers of a municipality's zoning requirements before they make development plans, helping to maintain and protect existing buffer zones, while encouraging new plantings. This proactive approach encourages cooperation between municipalities and private parties.
- **Focused on Resources:** By developing an ordinance on natural resource protection, focusing on woodlands, a municipality can allocate its resources to maintain and negate potential disturbance.
- **Implements Municipal Plans:** The enactment of a woodland protection ordinance helps implement municipal plans, including the Comprehensive Plan and Open Space Plan, where the recommendations may specify woodland protection. This also informs local zoning ordinances on resource protection, assuring they are consistent with the municipality's long-term goals.
- **Can be Linked to Zoning and Subdivision and Land Development Ordinances:** Municipal natural resource ordinances should include regulations that link to Zoning and Subdivision and Land Development Ordinances to limit potential woodland disturbance. This ensures that possible conflicts are addressed during the



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plan review stage—for example, to ensure setbacks of buildings do not fall within the specified woodland areas. In cases where only a building permit is needed, the code enforcement officer can review plans to prevent construction within designated woodland zones.

- **Supported by Grant Funding:** Developing and adopting a woodland protection ordinance can be supported through county and federal funding sources for municipalities that present a cohesive plan and technical readiness for development.
- **Provides Ecological Benefits:** Woodlands and riparian buffers provide water quality benefits that include protecting the quality of the water we drink; stabilizing stream banks and minimizing erosion; reducing downstream flooding by absorbing and slowing the flow of stormwater; preventing sedimentation, which can choke off stream bottom life; providing shade, which helps to control stream temperature fluctuations and prevent elevated temperatures harmful to aquatic life; providing food and habitat for wildlife; allowing for wildlife movement within corridors; protecting associated wetlands; and, providing the potential for outdoor recreational opportunities.
- **Flood Resiliency:** The ordinance process can delineate areas that might be protected for floodplain resiliency through an overlay district or strengthened zoning provisions.

MISCONCEPTIONS

- **Does Not Have to be the Entire Municipality:** If a municipality adopts a woodland protection ordinance, the provision will only apply within the areas with existing woodlands—specifically to maintain and prevent disturbance.

WHAT CAN BE INCLUDED

Enactment of zoning ordinance amendments can be found in Article VI. Zoning of the Pennsylvania Municipalities Code (MPC). Woodland Provisions can include riparian buffer protections. Features identified in the Riparian Buffer Toolkit include:

- **Riparian Buffer Zones (Two Forested Zones):** specifying the width of each forest riparian buffer zone on either side of the watercourse and identifying provisions permitted by-right within the designated zone.
- **Zone One (Inner Riparian Buffer):** minimal to no disturbance. May require active reforestation under development scenario if zone is devoid of trees.
- **Zone Two (Outer Riparian Buffer):** limited disturbance associated with compatible uses (trails, management of invasive species, etc.).
- **Riparian Buffer Disturbance:** identifying provision prohibited within both forested riparian buffer zones or with exception through Township approval.

- **Maintaining Riparian Buffer Vegetation:** identifying the means of maintenance for riparian buffers on the sides of a watercourse.
- **Restoring Riparian Buffer Vegetation:** identifying specifics if a forested riparian buffer is disturbed.
 - Setbacks for Potential Water Pollution Hazards
- **Protective Covenants for Riparian Buffers:** a form for submission and approval through the Township when applying for a subdivision application to ensure the maintenance of forested riparian buffer.
- **Extending the Riparian Buffer Width:** additional provision to extend the forested riparian buffer beyond the minimum required width when steep slopes are found within the buffer zone.

Additional Features in Woodland Protection Provisions include

- **Enhanced Riparian Buffer Standards**
- **Specimen Vegetation Protection**
 - Specimen vegetation refers to collections of plants valuable for botanical research, conservation purposes, or for studying the distribution and life history of plant species.
 - While “native plant” is not always explicitly defined in municipal zoning ordinances, municipalities often refer to “specimen vegetation” as any living tree or plant deemed of specimen quality. This quality can be defined as unique, culturally valuable, or historically significant, as assessed by a registered landscape architect, arborist, horticulturist, or the Township itself. Definitions may specify diameter at breast height (DBH) as a determination of a tree’s specimen quality.
 - Ordinances in the zoning or SALDO can outline specifics for removal and

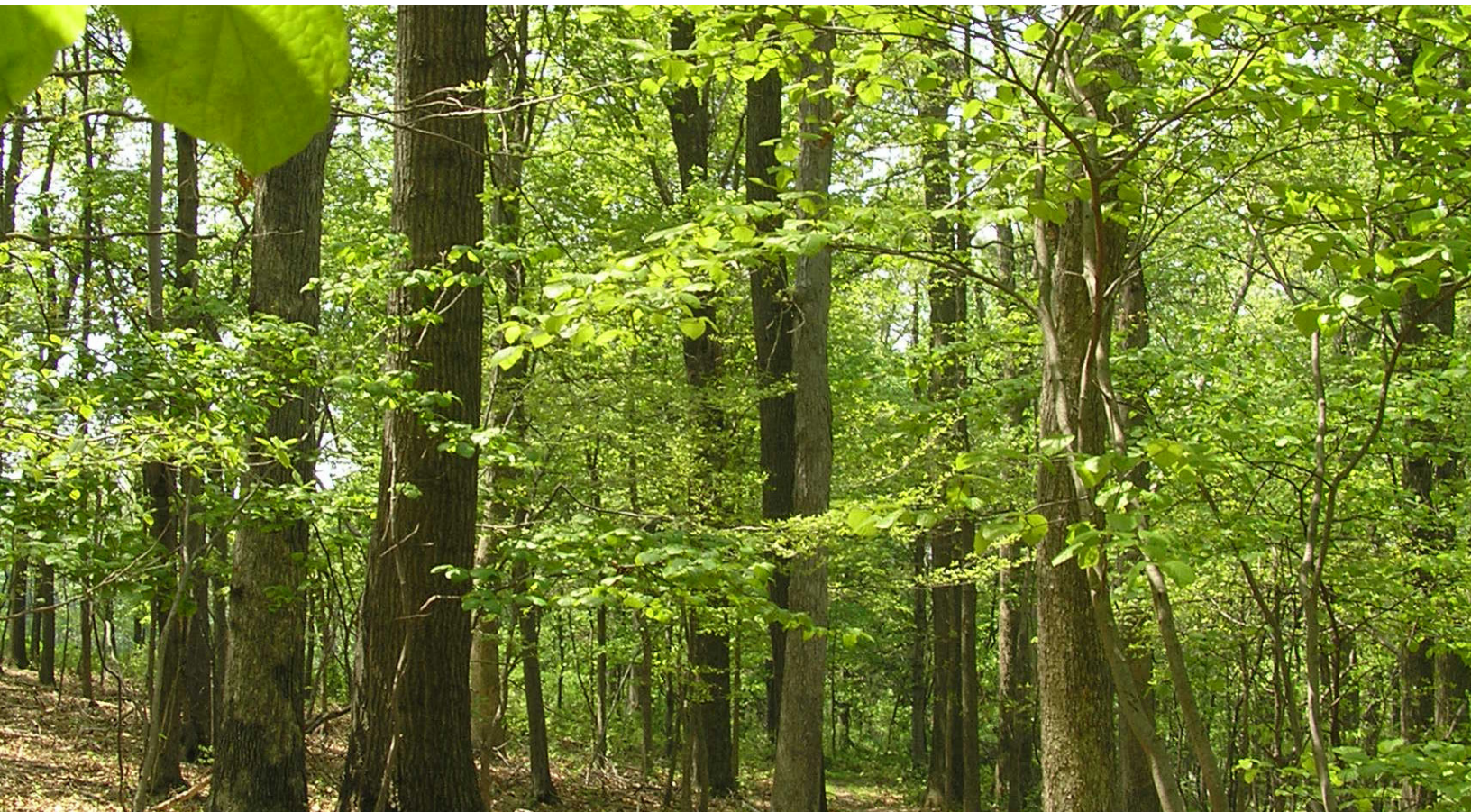


replacement to ensure that trees are protected, only allowing the removal of dead, diseased or those posing harm.

- **Maximum disturbance protections**
 - Disturbance protections can be included in provisions based on woodland type or zoning district type. These protections can limit disturbance based on percentages (i.e., maximum disturbance of no more than 40%). Ordinances may require a tree survey to be conducted during a development project. Municipalities can also require woodland delineations.
- **Trees Fee in Lieu**
 - To incentivize woodland protection, protection ordinances can include replacement requirements when disturbance is exceeded. These protections are often in the Subdivision and Land Development Ordinance. Standards may require replacement with specifics on caliper of tree. Municipalities may wish to specify if replacement trees are of a native

species or if they are of a specific species. A municipality can also provide information on local nurseries who can provide species to a developer for replacement.

- With fee-in-lieu, ordinances may outline the ability for developers to contribute to a “tree bank” or tree program if the ability to replant on the parcel is not a possibility. These funds can then be used on other parcels within the municipality to plant trees for a variety of benefits.
- Tree or shrub inventory
 - Ordinances may choose to include language in the ordinance or an appendix outlining an inventory of trees and shrubs for replacement. This inventory can specify species and size, while calling out requirements for natives, if the municipality would like that to be a consideration during replanting. Tree inventories may be less specific with language referring to a diameter at breast height (DBH) for removal and replacement.
- Tree diversity and the right tree in the right place
 - Municipalities may wish to require a diverse range of species be planted to safeguard against any unforeseen impact on one species, such as the Emerald Ash Borer’s impact on the Ash population. A random distribution of several street tree species should also be encouraged for the same reason. Species lists should indicate the characteristics (preferred soil conditions, fall color, spring flowering, mature height, etc.) of each tree and its potential best application (riparian, upland, street tree, understory, etc.).
- During Development
 - Specific tree protection standards should be specified within a municipalities Subdivision and Land Development Ordinance. These outline specific measures taken on site to protect the health of those trees remaining.



KEY CONSIDERATIONS

- Woodland protections, along with other natural resources, should be supported by an adopted Comprehensive Plan.
- Robust public engagement and education should be included during the development phase to address maintenance, disturbance and misconceptions about this process, and provide for public and stakeholder input. It can be helpful to engage property owners with woodland buffers on their properties early in the process. Proactive transparency is important during this process.
- Woodland protection ordinances typically take 8 months to a year to develop and adopt.
- Financial and technical support may be offered through county planning commissions.

ENABLING LEGISLATION

Pennsylvania Municipalities Planning Code

Article VI of the Pennsylvania Municipalities Planning Code (MPC) allows municipalities to enact, amend and repeal zoning ordinances to implement comprehensive plans, which includes natural resource protections.

Delaware Code

Outlined in Delaware Code Title 9 Chapter 26 Zoning §2603, regulations outlined by the County Council include regulations adopted for the purpose of promoting the health, safety, morals, convenience, order, prosperity or welfare of the present and future inhabitants of this State, including the conservation of natural resources.

EXAMPLES

Some woodland protection ordinances outline provisions on disturbance limits, whereas others identify specifics on tree replacement after removal is exceeded. The following are municipalities that have a variety of provisions within their existing ordinances:

Chester County

- East Bradford Township – §114-45
- East Vincent Township – §22-429
- Kennett Township – §240-1802
- Pennsbury Township – §162-1503
- West Brandywine Township – §200-100
- West Vincent Township – §202
- Willistown Township – §73-13

Delaware County

- Radnor, Township – §280-89.6
- Middletown, Township – §500-2601

Tree plantings act as a great way to get the community involved in restoring a riparian buffer.



DEVELOPMENT AND ADOPTION

Identify Goals

- Determine the features for protection within the woodland protection ordinance, such as specific definitions of woodland areas, establishing maximum disturbance, and specifying incentives for woodland replacement (i.e., vegetation species).
- Determine Location: Determine whether new or amended provisions will be located in the zoning, Subdivision and Land Development ordinance, or both.

Preliminary Steps

- Identify a budget and potential funding sources.
- Determine Responsible body: Determine whether the governing body will oversee this process or if it will be delegated to the Planning Commission or a project task force.
- Technical Support: Determine if a consultant will be needed to support the development of any tree and/or woodland protection provisions.
- Review MPC: Ensure that the planning team has reviewed the MPC's guidance on the development of zoning ordinances and amendments.

Identify Features to be Included in the Ordinance

- Determine the most critical features to include within the ordinance. These features should be well documented in the Comprehensive Plan and other Township planning documents. The most critical features to include on the map. These features should be well documented in the Comprehensive Plan and other planning documents.



Draft Ordinance Creation

- The ordinance should clarify the intent and purpose of the woodland protection provisions, specify the protections represented, and detail its intended application.
- A planning consultant or township solicitor can assist with producing the draft ordinance.

Landowner Outreach

- Engaging landowners of properties with woodlands early in the process is essential for promoting transparency and fostering a clear understanding of the process.
- Holding dedicated meetings with landowners provides an opportunity for them to ask questions and fosters an open dialogue between landowners and the municipality, especially if such communication has not yet been established.

Public Review and Input

- The MPC stipulates that the municipal planning commission must have 45 days to review the ordinance; however, if the commission is the one that created the ordinance, this review may not be required.
- During this 45-day review period, the protection ordinance must be submitted to the County Planning Commission and surrounding municipalities for a 45-day review.

- The ordinance should also be available for public review.

Adoption

- Once the 45-day review period is over and comments are collected, the municipality is required to hold a Public Hearing prior to adoption.
- If the Public Hearing does not lead to any changes or only minor corrections to the ordinance, the governing body can proceed with adopting the woodland provisions, contingent on any minor corrections.
- If significant revisions are proposed, such as substantial additions or deletions of features, a new Act 247 Review and Public Hearing should be conducted before adoption.
- Upon completion of the public hearing, the governing body may vote to adopt the ordinance.
- Within 30 days of adoption, the ordinance must be sent to the surrounding municipalities.
- After adoption, the ordinance must be submitted to the county recorder of deeds within 60 days of adoption.

Next Steps

- Amend existing Zoning and Subdivision and Land Development ordinances to reflect and reference the woodland provisions.
- Incorporate the provisions into the standard review process for Subdivision and Land Development applications and approvals.
- Update the online version of the municipalities zoning ordinance to include the new/updated riparian buffer protections ordinance either on the Township's website or through eCode.

ADDITIONAL RESOURCES

- *Forested Riparian Buffer Planting Guide for Landowners and Developers—Brandywine Conservancy*
- *Guide and Model Ordinance for Pennsylvania Municipalities, Riparian Buffer Protection via Local Government Regulation—Brandywine Conservancy and WeConservePA*
- *Woodland Conservation eTools—Chester County Planning Commission*
- *Trees and Woodlands—Chester County Planning Topics*



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