

A CONSERVATION GUIDEBOOK FOR COMMUNITIES ALONG THE APPALACHIAN NATIONAL SCENIC TRAIL

Pennsylvania Department of Community and Economic Development

In association with

Pennsylvania Department of Conservation and Natural Resources

Pennsylvania Department of Environmental Protection

Appalachian Trail Conservancy

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Northeastern Lehigh
Valley, as seen from
the Appalachian Trail at
Totts Gap, Monroe and
Northampton Counties..
Photo by Nicholas_T,
www.flickr.com.

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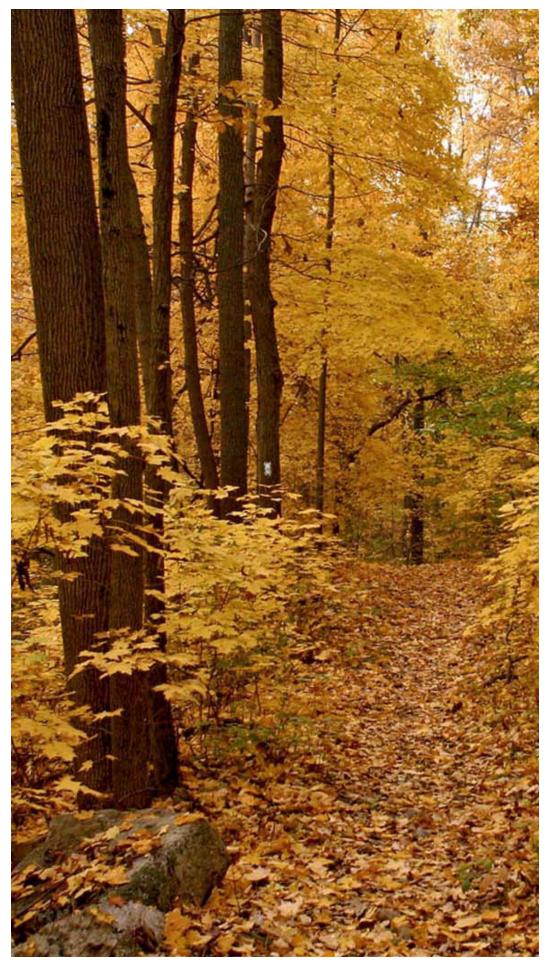


Photo by Timothy Cummings, Appalachian Trail Conservancy

...To preserve the natural, scenic, historic and aesthetic values of the Trail and to conserve and maintain it as a public natural resource...

[Section 4. PA Appalachian Trail Act, as amended May13, 2008]

INTRODUCTION

In June 2008, Governor Rendell signed Act 24 requiring 58 Pennsylvania municipalities along the Appalachian National Scenic Trail to take such action consistent with applicable law, as at least an interim measure, to preserve the natural, scenic, historic and aesthetic values of the trail and to conserve and maintain it as a public natural resource. Such action shall include the adoption, implementation and enforcement of zoning ordinances as the governing body deems necessary to preserve those values¹. Act 24 also authorizes the Pennsylvania Department of Community and Economic Development to assist municipalities in complying with the Act's mandates.

In September 2008, a Task Force was established to design a program to implement the intent of Act 24². It identified an initial need for resource material to assist municipalities in developing zoning and other conservation strategies most appropriate to their circumstances. This Guidebook, along with other information available on the website (www.apptrailpa.org) was prepared for such purposes. It summarizes the Trail's interesting history, the challenges facing the Trail today and the essential role of local communities and counties as partners with the Commonwealth of Pennsylvania, the National Park Service, the Appalachian Trail Conservancy and other nonprofits in maintaining the Trail's landscape experience.

The Guidebook identifies seven characteristics of communities that are most likely to be effective in addressing issues associated with the Trail. Those characteristics provide the basis for a suggested checklist for municipalities to use in making their own assessments of the Trail and it needs.

This is the job that we propose... a project to develop the opportunities for recreation, recuperation and enjoyment in the region of the Appalachian skyline ... to be connected by a walking trail.

[Benton MacKaye. "An Appalachian Trail: A Project in Regional Planning." Journal of the American Institute of

Architects (October 1921).]

THE TRAIL'S HISTORY

BENTON MACKAYE'S CONCEPT

In October 1921, a forester named Benton MacKaye from Shirley, Massachusetts, published an article in the Journal of the American Institute of Architects, entitled *An Appalachian Trail - A Project in Regional Planning*. His bold vision was a regional plan for the ridges and valleys comprising the Appalachian Province, which extends from Maine to Georgia. He envisioned a "long trail...from the highest peak in the north to the highest peak in the south - from Mt. Washington to Mt. Mitchell." He proposed to divide the trail in sections, each to be in the immediate charge of a local group of people. MacKaye anticipated that difficulties could arise over the use of private property, but added that such matters could be addressed "if there were sufficient local public interest in the project as a whole."

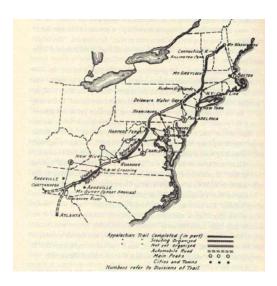
He also proposed shelter camps at convenient distances to allow a comfortable day's walk, and equipped for sleeping and meals, modeled after Swiss chalets. MacKaye's proposal went further, which included new permanent forest camps to oversee a sustainable forest management system, new communities on or near the trail, and "food and farm camps" as special communities in adjoining valleys.

THE TRAIL'S DEVELOPMENT

In 1921, parts of the trail already existed, largely as a result of the efforts of independent volunteer organizations such as the Appalachian Mountain Club founded in 1876. In 1922, MacKaye led the first effort to develop the Appalachian Trail by organizing a small group in Washington, DC. That same year, the first field work in developing the Trail occurred in the Harriman and Bear Mountain sections of the

Palisades Park in New York and New Jersey. In 1925, the first Appalachian Trail Conference was held in Washington, DC, resulting in establishing a permanent Trail body with an executive Committee.

The Trail has a rich Pennsylvania history. In 1926, Professor Eugene Bingham of Lafayette College organized the Blue Mountain Club to aid in the Trail's construction. In 1929, the third Appalachian Trail Conference was held in Easton, PA where the Trail's insignia was adopted and Pennsylvania trail construction issues were addressed. With the Blue Mountain Club's completion of the Trail in 1932 between Smith Gap and Little Gap, Pennsylvania was added to the list of states in which the Trail was completed.





In 1937, a program was initiated to construct a chain of lean-tos along the Trail's entire route. The eighth Appalachian Trail Conference, held in the Great Smoky Mountains National Park, adopted the concept of a protected corridor, called the Appalachian Trailway. In 1938, the National Park Service and the U.S. Forest Service signed an agreement to extend the Trailway one mile on either side of the Trail, where no new parallel roads or incompatible development would be permitted. In 1939, a Trailway agreement was executed for state-owned lands, establishing a protected zone of one-quarter mile on either side of the Trail.

THE NATION'S FIRST NATIONAL SCENIC TRAIL

In 1945, Congressman Daniel Hoch (Berks County), a member of the Appalachian Trail Conference's board of managers, first introduced federal legislation to create a national system of foot trails, which did not pass. Senator Gaylord Nelson (Wisconsin) took up the cause, and the National Trails System Act was signed into law by President Johnson on October 2, 1968, establishing the Appalachian National Scenic Trail which, with Pacific Crest Trail, were the first national trails created by the Act. The Appalachian Trail Conference (now called the Appalachian Trail Conservancy) was instrumental in the legislation's passage. Since that time, 22 national trails have been added to the national trails system.

Today, the Appalachian Trail is 2,178.3 miles long and extends from Maine to Georgia within a protected 250,000 acre greenway. In Pennsylvania, except for a few short sections along highways, the Trail's 229 mile route is within a protected corridor of varying dimensions, consisting of lands owned largely by the National Park Service and state agencies. The entire Appalachian Trail from Maine to Georgia is maintained by 30 volunteer trail clubs, 11 of which are active in Pennsylvania.

National scenic trails...so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural or cultural qualities of the areas through which such trails may pass...

[Section 3, National Trails System Act, as amended May 8, 2008]

CHALLENGES IN MAINTAINING THE TRAIL EXPERIENCE

Now almost 90 years old, the Appalachian Trail has a national reputation. As described by Paul Lehman of the Blue Mountain Eagle Climbing Club, it is a trail "not made to be easy but to get to the most scenic and wild areas - a wilderness foot trail generally following along the crest of the Appalachian mountain system."³

Although its path is now largely protected within a corridor of public lands, the Trail experience through wilderness and rural countryside is vulnerable to irreversible change in a developing region. The experience of being on the Trail is vulnerable to major land development as well as the incremental and cumulative impacts of smaller development projects. Given those prospects, protecting the experience must be seen as an ongoing effort, requiring the sustained support and cooperation of trail users, public agencies, adjacent landowners, local communities, public agencies and nonprofit organizations.

A PROTECTED CORRIDOR THAT VARIES IN SHAPE AND SIZE

In Pennsylvania, the Trail's protected corridor ranges from large tracts of public land to sections that may only be several hundred feet wide. Examples of large tracts include the Delaware Water Gap National Recreation Area, PA Game Commission lands in Berks, Lebanon, Schuylkill, Carbon and Lehigh Counties, and PA Bureau of Forestry lands in Cumberland and Franklin Counties. Representative locations of the Trail's smaller corridor occur in Middlesex, Silver Spring, South Middleton and Monroe townships in Cumberland County.

In many instances, the Trail is not in the center of protected lands, meaning that only one side of the Trail may be adequately protected. Because various corridor sections have jagged boundaries, the Trail's vulnerability can vary quickly over short distances. Further protection of certain corridor sections are needed, either through fee acquisitions or conservation easements.







DIVERSE CIRCUMSTANCES OF ADJACENT LANDOWNERS

Many sections of the Trail have benefitted from the long term stewardship of adjacent landowners. They are a diverse group that includes seasonal and year-around residents who value their proximity to the Trail's protected corridor, as well as owners of larger tracts, such as water companies, having specific ownership interests. Many adjacent landowners are expected to regard their properties as investments, possibly enhanced by proximity to the Trail corridor.

Relationships between the Trail corridor and adjacent lands will vary according to location, property characteristics, the Trail corridor's configuration, zoning and other factors. For example, a large wood-land tract adjacent to a narrow corridor and subdivided into one-acre lots, would have a greater impact than a small home constructed on a ten-acre parcel adjacent to a wide section of the corridor. On the other hand, a large home constructed on a nearby ridge top may have a greater impact than a well-designed conservation design subdivision adjacent to the Trail.

The Trail would benefit from outreach programs focusing on building positive relationships with adjacent landowners, as well as providing information and assistance to those faced with decisions that could impact the Trail. Fortunately, the region has a number of qualified nonprofit land trusts that can work with communities in such efforts.

NEED FOR MUNICIPAL LAND USE CONTROLS

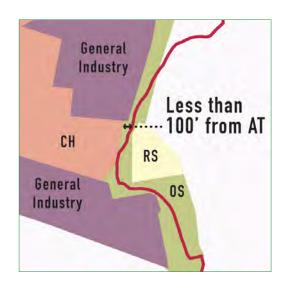
All but a few of the Trail's 58 municipalities have zoning regulations. In that much of the Trail traverses rural areas, those regulations have residential zoning districts with names such as Conservation, Rural Preservation or Woodland Conservation. However, such districts vary considerably in their minimum lot size requirements, i.e., ranging from under one acre to ten acres. In certain locations where the Trail is near major arterial highways, adjacent lands are likely to be zoned for commercial or industrial uses.

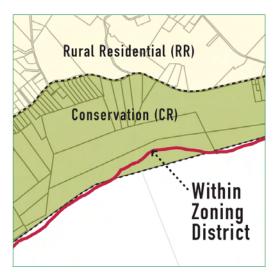
Continued residential development is the most likely long-term prospect for a large percentage of lands adjacent to the corridor. It will include a mix of new houses on existing rural parcels, and residential subdivisions ranging from relatively small tracts to those of several hundred acres or more. Although the potential local impact of every development project is a real concern, the cumulative impacts of

development over time could significantly impact the Trail experience.

Future development along the Trail corridor will not be limited to residential subdivisions, as evidenced by the Alpine Rose Resort proposal in Eldred Township, Monroe County. Although that particular project may have little association with its proximity to the Trail, other major projects oriented towards recreational markets may be particularly attracted to locations adjacent to the protected corridor.

Its meandering route can make it difficult to achieve consistent protection on both sides of the Trail. In many sections, the Trail closely follows political boundaries and zigzags in and out of neighboring municipalities. Those conditions make it especially important to have accurate maps, and for adjoining municipalities to cooperate in addressing proposed development projects that could impact the Trail.





THE TRAIL'S EXPANSIVE VIEWS IN A DEVELOPING REGION

As originally envisioned by MacKaye, the Trail provides opportunities for expansive views of the ridge and valley landscapes associated with the Appalachian Province. Although he wanted the Trail to provide a backcountry wilderness experience unique in the eastern United States, MacKaye also believed that long views of America's countryside and towns would provide an opportunity for hikers to reflect upon the world they live in.

In the 1920s, those views were predominantly a landscape of farms, rural centers, more distant smoky industrial towns, and the beginning of exurban development associated with the emergence of the automobile and new highways. Today, on a clear day, the hiker will continue to experience woodlands, farming areas and historic towns, as well as encroaching suburban development in many locations. Numerous sections of the Trail are exposed to nearby urban areas such as Harrisburg, Reading and Bethlehem-Allentown, as well as some of the fastest growing counties in Pennsylvania, including Monroe, Berks, Cumberland and Northampton.

In Pennsylvania, the Trail's viewshed includes a large part of the nearly one million acres under the jurisdiction of the municipalities through which it passes, as well as extensive areas in adjoining municipalities. The 2000 U.S. Census estimated that the Trail's 58 municipalities had a population of more than 250,000 people. Projections suggest an increase of nearly 65,000 people between 2000 and



Photo by Timothy Cummings, Appalachian Trail Conservancy

2030, representing a growth rate of approximately 25 percent, compared to a statewide growth rate of 7.4 percent⁴. Of perhaps greater consequence to the viewshed is that 2000-2030 population increases could be accompanied by as much as 20,000 acres of land consumed for new suburban development.

The impacts of regional growth on the Trail's viewshed will be associated with dispersed suburban settlement patterns more than actual population increases. Most county plans call for measures to contain growth, but short of the extensive use of joint municipal planning and effective urban growth boundaries, individual municipalities are unlikely to alter such settlement patterns, particularly if they are in the path of growth.

Trail viewshed concerns alone will not provide an impetus for new regional growth strategies. However, the Trail's viewshed encompasses extensive forested ridges and rural countryside of concern to many other interests not necessarily related to the Trail. Therefore, it will take a coalition of such interests to address landscape scale challenges. Fortunately, with state funding support, landscape initiatives are underway for South Mountain and Kittatinny Ridge. The recent success in establishing the Cherry Creek National Wildlife Refuge in Monroe County is an example of how such coalitions can achieve success at a landscape scale.





NEED FOR GREATER TRAIL AWARENESS

Benton MacKaye envisioned that the Appalachian Trail would have connections with other trails in local communities, a goal that continues today in many state, county and local greenway plans. But many sections of the Trail remain out-of-sight and are not easily accessible. Such conditions, combined with the impression that the Trail is suited primarily for hard core hikers, may be a deterrent for some municipalities to become actively involved in protecting the Trail experience. Yet only a relatively small group of "through hikers" walk the entire Trail every year. Most hikers are local trail enthusiasts of all ages, many of whom live in or near the communities through which the trail passes. Such trends reflect the findings of a statewide survey that walking for pleasure and fitness has the highest recreational participation rates of Pennsylvania's residents⁵.

Currently, the Pennsylvania section of the Trail has approximately 50 trailhead parking areas. Although access may be possible from other non-designated locations, 23 of the Trail's 58 municipalities have no designated trailhead parking area within their jurisdictions. Of the remaining municipalities, 19 have one designated parking area each, and 16 have more than one area (typically two). Given the small staff of the National Park Service and Appalachian Trail Conservancy, and the commitments of volunteer trail clubs, available resources are stretched in terms of maintaining trailhead parking and signage.

Communities are more likely to take actions to protect the Trail if they believe that it contributes to their quality of life. Community awareness and appreciation of the Trail will be enhanced with good trailhead parking areas and signage, as well as providing connecting trails for local residents.







THE CASE FOR COMPREHENSIVE STRATEGIES

As described in the preceding sections, some of the major challenges facing the Trail can be summarized as follows:

- 1. Because the Trail corridor varies in shape and size, certain sections are well protected whereas others are not. Opportunities to expand the Trail's corridor should be pursued for those sections currently not well protected.
- 2. Although the Trail has benefited from the stewardship of many adjacent private landowners, they are a diverse group whose future decisions could have positive or negative impacts. Needed are sustained initiatives to provide information and assistance to landowners on conservation and Trail-sensitive development strategies appropriate to their circumstances and interests.
- 3. Many municipalities have zoning provisions benefitting the Trail but they vary in the extent to which they protect the Trail and its related landscapes. The Trail would benefit from the application of a number of zoning techniques consistently applied along its corridor. Such techniques could also help to achieve other community conservation goals.
- 4. Parts of the Trail's expansive viewshed encompasses entire municipalities and larger landscapes threatened by continued dispersed settlement patterns in a developing region. Viewshed protection, so important to the Trail experience, will require landscape scale initiatives extending beyond the boundaries of individual municipalities.
- 5. Because many Trail sections are relatively remote with limited access, communities may not be sufficiently aware of the Trail and its vulnerability. Their appreciation of the Trail will be enhanced by making it more accessible to local residents.

These five issues are interrelated, thereby suggesting the need for a comprehensive strategy rather than dealing with one issue at a time.





SEVEN CHARACTERISTICS OF EFFECTIVE TRAIL COMMUNITIES

Although Act 24 focuses on the use of municipal zoning powers, trail protection issues tend to be complex. Zoning will be an important tool when applied carefully and in coordination with other actions and considerations. For example, a community that gives little recognition to the Trail and has a limited capacity to address trail-related issues will not be in a strong position to enact and enforce regulations to protect the Trail and its related landscapes. Similarly, a municipality that has not carefully assessed the Trail's related landscapes may not be fully informed about which zoning techniques will work best. A municipality lacking knowledge of the circumstances and concerns of landowners may miss important conservation opportunities requiring certain kinds of zoning to be implemented.

Although circumstances may vary greatly among municipalities, it is suggested that those having certain common characteristics are most likely to be in the best position to adopt successful strategies for the Trail. More specifically, the following seven characteristics might be considered for an idealized Trail community.

- 1. It recognizes the Trail's national and local significance
- 2. It has identified the Trail's related landscapes and their susceptibility to change
- 3. Its zoning regulations are oriented towards landscape conservation
- 4. Its zoning and subdivision regulations provide mandates and incentives for conservation design
- 5. Its regulations address potentially high impact uses
- 6. It works effectively with key landowners willing to consider conservation options for their lands
- 7. It has the capacity and interests to address Trail-related issues on a long-term basis

It is anticipated that these characteristics may need to be refined as a result of experience in working with them. However, at this time they provide an initial framework of "principles" for those municipalities intending to make a careful assessment of the Trail, as presented in the following section of this Guidebook.

Municipalities shall have the power and duty to take such action, as least an interim measure, which shall include the adoption of zoning ordinances as the governing body deems necessary...

[Abstracted from Section 4. PA Appalachian Trail Act, as amended May13, 2008]

A CHECKLIST FOR COMMUNITY SELF-ASSESSMENTS

The assessment checklist is structured around seven community characteristics or principles:

1.0 LOCAL RECOGNITION OF THE TRAIL AND ITS SIGNIFICANCE

- 1.1 Local Access and the Trail Experience
- 1.2 Recognition in the Comprehensive Plan
- 1.3 Actions to Enhance Community Appreciation of the Trail

2.0 TRAIL-RELATED LANDSCAPES AND KEY PARCELS

- 2.1 Landscapes Contributing to the Trail Experience
- 2.2 Patterns of Current Ownership and Use
- 2.3 Identification Key Parcels

3.0 ZONING FOR LANDSCAPE PROTECTION

- 3.1 Applicability of Base Zoning to the Trail and Its Related Landscapes
- 3.2 Standards and Overlays to Protect Specific Resource Features
- 3.3 Regulations Addressing Narrow Sections of the Trail's Protected Corridor

4.0 MANDATES AND INCENTIVES FOR CONSERVATION DESIGN

- 4.1 Local Experience with Conservation Design
- 4.2 Current Conservation Design Standards

5.0 REGULATING POTENTIALLY HIGH IMPACT USES

- 5.1 Current Uses and Future Prospects
- 5.2 Adequacy of Current Regulations

6.0 WORKING RELATIONSHIPS WITH KEY LANDOWNERS

- 6.1 Community History of Voluntary Land Conservation
- 6.2 Knowledge of Key Landowners
- 6.3 Potential for Landowner Outreach

7.0 MUNICIPAL CAPACITY TO ADDRESS TRAIL AND RELATED LANDSCAPE ISSUES

- 7.1 Municipal Interests and Capabilities
- 7.2 Access to Technical Assistance

In addition to providing a methodology to assist municipalities in responding to Act 24, a consistent assessment approach also offers opportunities for creating a "knowledge base" that can be shared among municipalities. The checklist is presented in more detail in the following pages. The questions provided may not be necessarily applicable in all cases.

Municipalities may record their responses to the checklist in a variety of ways. Although systematic documentation of their responses would be desirable, the most important outcome is community interest and understanding of the Trail which will lead to new commitments to protect the Trail as a public resource.



The community is aware of the Trail's significance as a National Scenic Trail and recognizes that the landscapes within its jurisdiction contribute to the quality of the Trail experience. It also recognizes the Trail as a community asset and has adopted policies to protect the Trail and its related landscapes in its Comprehensive Plan or other planning documents.

COMMENTARY

Local awareness and appreciation of the Trail are important to a municipality's willingness to take actions to protect it. Therefore, a review of the extent to which the Trail is known and used by the community is an important first step in the assessment process. Important indicators are ease of Trail access, walking conditions and local perceptions regarding risks in using the Trail.

Recognition of the Trail in the municipality's Comprehensive Plan or other planning documents is important as a public policy statement that provides the basis for regulatory and other actions. In addition to being descriptive, such documents should ideally identify Trail issues particular to the community.



LOCAL ACCESS AND THE TRAIL EXPERIENCE

- ✓ How easy is it for residents to gain Trail access, either in their own or nearby communities? Are maps of the Trail available to local residents at trailheads or elsewhere in the community?
- ✓ What is the experience of being on the Trail? Are its conditions suitable for family outings or mostly for serious hikers? Is it used by local schools or other groups?
- ✓ Does the Trail have connections with other trails in the community, enabling loop trips? Or must local hikers arrange to be picked-up at another destination point or return to their departure trailhead?

1.2

TRAIL AND GREENWAY RECOGNITION IN THE COMPREHENSIVE PLAN

- ✓ To what extent is the Trail specifically recognized in the municipality's Comprehensive Plan or other planning documents? For example, is it recognized as part of an important greenway, along with other elements of the community's existing or proposed open space system?
- ✓ Do municipal planning policies recognize the Trail's connection with greenway plans in adjoining municipalities and at the County level? To what extent do those policies reflect the intent of the Pennsylvania Municipalities Planning Code's provisions for inter-municipal coordination of comprehensive plans?
- ✓ To what extent do the municipality's planning documents recognize and call for the protection of landscapes associated with the Trail, such as Blue Mountain?



ACTIONS TO ENHANCE COMMUNITY APPRECIATION OF THE TRAIL

✓ What actions might be considered to enhance the community's appreciation of the Trail and other greenways, such as improving access and trail conditions, an educational program, or arranging for organized outings?



2

The municipality has identified lands contributing to the Trail's landscape experience and it has assessed patterns and trends in their ownership and use. It has identified key properties whose future ownership and use could impact the Trail.

COMMENTARY

As already noted, the landscape experience of being on the Trail is associated with the character of the lands through which it passes. Such landscapes also define a community's overall character and "sense of place" and, therefore, are likely to be important to a community for reasons beyond their association with the Trail.

This principle addresses the need for communities to: (a) identify landscapes associated with the Trail, (b) assess their current patterns of land ownership and use, and (c) identify key properties where changes in land use which could have potentially adverse impacts on the Trail. It requires field observations, as well as technical expertise which many municipalities may not have in-house but which is available from county planning departments or other planning professionals in the private and nonprofit sectors. See Appendix B for an illustration of one approach to a landscape assessment. professionals in the private and nonprofit sectors. See Appendix B for an illustration of one approach to a landscape assessment.



LANDSCAPES CONTRIBUTING TO THE TRAIL EXPERIENCE

- ✓ What are the general types of landscapes through which the Trail passes? For example, do they include wooded ridges, stream valleys, agricultural lands, historic sites, residential areas or other types of lands?
- ✓ What is the landscape experience when walking along the Trail, and how would that vary between seasons with and without foliage?
- ✓ Is the municipality able to acquire, organize and display map layers that accurately portray lands associated with Trail's landscape experience?

2.2

PATTERNS OF CURRENT LAND OWNERSHIP AND USE

- ✓ To what extent is the Trail's landscape experience protected by lands already in public or nonprofit ownership along the Trail corridor?
- ✓ What is the pattern of land ownership, parcel size and use of the Trail's related landscapes outside of its currently protected corridor?

2.3

KEY PARCELS

✓ Are there key parcels that could adversely impact the Trail's landscape experience?



The municipality is using its zoning powers to help protect landscapes associated with the Appalachian Trail and other greenways within its jurisdiction. Its base zoning districts reflect the inherent suitabilities and limitations of such landscapes. It has adopted performance standards and overlay districts to protect specific resource features. Its zoning regulations also contain standards that control incompatible uses on lands adjacent to the Trail corridor.

COMMENTARY

Section 4 of Act 24 specifically requests municipalities to use their zoning powers, as they deem necessary, to preserve the natural, scenic, historic and esthetic values of the trail and to conserve and maintain it as a public natural resource. No one-size-fits-all zoning ordinance would be universally applicable to address the diverse circumstances of municipalities along the Trail.

It is suggested that the results of the landscape analysis (Principle 2) provide the basis for reviewing base zoning districts. Several examples of landscape oriented base zoning are provided on the Act 24 website (www.apptrailpa.org). It is also suggested that the zoning ordinance contain performance standards to protect specific resource features within those landscapes, such as woodlands and steep slopes, and, where appropriate, such features be designated as overlay districts. Examples of such standards and overlay concepts are also provided on the Act 24 website.

This principle also includes consideration of specific zoning provisions to address narrow sections of the Trail's protected corridor. Particular concerns are building sizes and setbacks, and the need for visual buffers to screen incompatible uses. Such provisions may be incorporated into base zoning or treated as a special trail overlay district, as currently used by several municipalities along the Trail. A model corridor overlay district is included as an appendix to this Guidebook, for municipalities who wish to consider that approach.



APPLICABILITY OF BASE ZONING TO THE TRAIL AND ITS RELATED LANDSCAPES

- ✓ How has the municipality currently zoned the Trail's related landscapes, and to what extent do the stated objectives, permitted uses, densities and other standards reflect landscape conditions and limitations, as well as municipal policies towards landscape conservation?
- ✓ Under current zoning, how would the cumulative "build-out" impacts of development affect the Trail's related landscapes? What kinds of zoning amendments could possibly reduce such impacts?



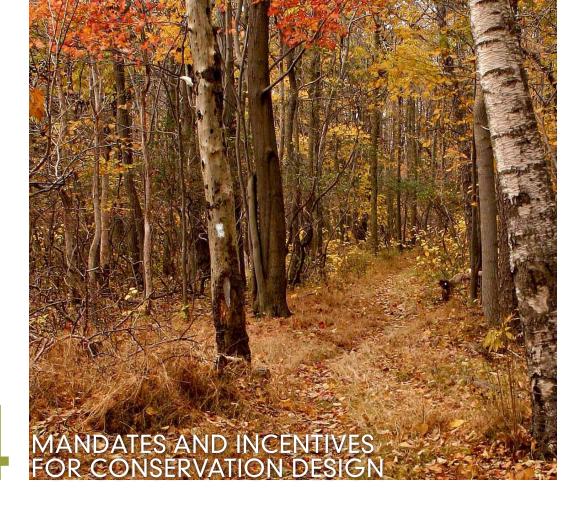
STANDARDS AND OVERLAYS TO PROTECT SPECIFIC RESOURCE FEATURES

- ✓ Does the municipality's zoning ordinance contain standards to protect specific resource features associated with the Trail's related landscapes?
- ✓ Do the standards appear to be reasonable and sufficient to serve their intended purposes? For example, do slope protection standards apply to moderate slopes or only to the steepest lands?
- ✓ To what extent is the municipality using zoning overlay districts to depict the locations of resource features for which it has adopted specific performance standards?



REGULATIONS ADDRESSING NARROW SECTIONS OF THE TRAIL'S PROTECTED CORRIDOR

- ✓ What are the dimensions and configuration of the Trail's existing protected corridor? Are there narrow corridor sections where the Trail may be particularly vulnerable to incompatible uses?
- ✓ Does the zoning ordinance contain standards that would protect narrow corridor sections? Such regulations would restrict certain kinds of incompatible uses and apply special standards, such as building sizes and setbacks, and requirements for visual buffers.



The municipality's zoning and subdivision regulations contain mandates and incentives to encourage "conservation design" of residential subdivisions. It recognizes that conservation design provides opportunities for protecting landscapes and creating interconnected greenways through the development process.

COMMENTARY

To be fully effective, a municipality's zoning ordinance must contain provisions that make conservation design an attractive option to conventional subdivisions. Such provisions need to strike an appropriate balance between requirements for land conservation and incentives such as bonus densities. It also requires support of informed landowners and developers having sufficient comfort with the concept and its economic feasibility, as well as an understanding that it may require additional planning considerations in dealing with issues such as ownership and management of conservation lands, and sewage treatment. Regulations must be drafted so they are not unnecessarily complicated and time-consuming for applicants.

Subdivision and land development regulations (SALDOs) are also important to conservation design. They should provide a process by which an applicant makes a careful analysis of onsite resources, prepares a resource conservation plan, and uses that plan as important input to the site development plan for buildings, lots and streets. Although mandatory sketch plan requirements can present administrative complications under the Municipalities Planning

Code, a municipality's strong encouragement of sketch plan submissions for conservation designs will be beneficial to the municipality and the applicant, prior to the applicant's investment in preliminary engineered plans.



LOCAL EXPERIENCE WITH CONSERVATION DESIGN

- ✓ Has the municipality had any experience with conservation design projects and what have been the outcomes?
- ✓ Has the municipality had discussions with landowners and developers regarding the potential application of conservation design as an alternative to conventional subdivisions?
- ✓ Are there nearby examples of successful conservation design projects?

4.2

CURRENT STANDARDS FOR CONSERVATION DESIGN

- ✓ Does the municipality's zoning ordinance have provisions for a conservation design option, and what incentives does it provide with respect to allowing for flexible lot sizes, diverse housing types and providing density bonuses?
- ✓ What provisions are in the municipality's SALDO, which require or encourage the conservation design process?
- ✓ To what extent does the municipality encourage the submission of sketch plans prior to the submission of preliminary plans?



5

In addition to its general regulations for controlling noise, visual and other environmental impacts, the municipality's zoning regulations address potentially high impact uses such as wind energy turbines, cell towers, major truck terminals, extractive industries and ski areas.

COMMENTARY

Because existing and prospective high impact uses will vary among municipalities, so will the need for different regulations to address them. For example, regulations governing wind farms will differ from those required for a major truck terminal, ski area or quarry. Therefore, a municipality's assessment should begin with identifying potentially high impact uses of current or potential concern, followed by a determination of the extent to which such uses are adequately covered in its existing zoning regulations.

Of particular interest is whether current zoning would permit uses that could have major impacts on the Trail, and the extent to which the Trail would be considered in the municipality's review of applications for such uses. Whereas the Trail itself may not necessarily be the major determinant in a municipality's decision-making, its regulations could include requirements to address potential impacts on the Trail and its related landscapes, and to take all reasonable measures to minimize such impacts.



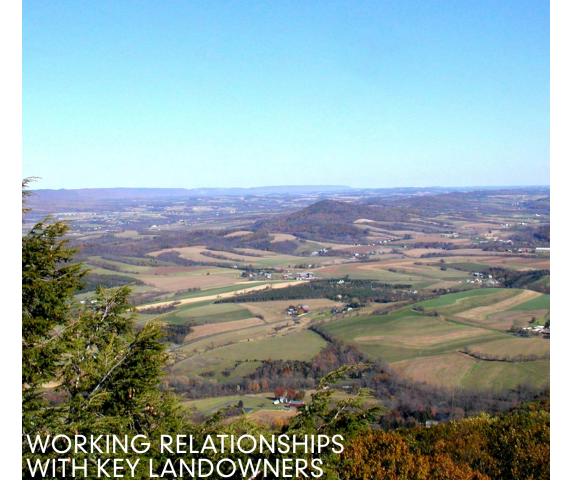
CURRENT AND FUTURE USES OF CONCERN

- ✓ Does the municipality currently have wind turbines, large warehouses, quarries, ski areas or other similar potentially high impact uses? If so, how have they affected the community and the Trail?
- ✓ Does the municipality anticipate expanded or new potentially high impact uses that could impact the community and the Trail?

5.2

ADEQUACY OF CURRENT REGULATIONS

- ✓ Does the municipality have general regulations pertaining to noise, lighting, pollutant emissions and other issues that apply to all land uses within its jurisdiction?
- ✓ Does the municipality's current zoning regulations allow for potentially high impact uses. If so, in what locations and what is their relationship to the Trail? Does it have special regulations for the siting, design and operation of such uses?
- ✓ Does the municipality require environmental impact statements for potentially high impact uses?



6

The municipality is prepared to work with key landowners currently or potentially interested in conservation and/or limited development plans for their properties. It is also willing to collaborate with a qualified land trust in such efforts.

COMMENTARY

Individual landowner decisions are usually the driving force behind the timing, location and types of land use change occurring in a community. A municipality can become proactive and have a positive influence on landowners if it becomes involved at a sufficiently early stage before irrevocable decisions are made.

A qualified land trust can provide professional assistance to landowners who wish to consider various options for their properties, and they can serve as an intermediary between landowners and a municipality. A collaborative initiative between a land trust and municipality can be an effective strategy for achieving a municipality's conservation goals. Such a program can be attractive to landowners, particularly when they have long-term interests in remaining in the community. A municipality and land trust are likely to be most effective when they have access to funds enabling them, if necessary, to acquire all or parts of a key property for conservation purposes.



COMMUNITY HISTORY OF LAND STEWARDSHIP AND LONG-TERM PROTECTION

- ✓ Have properties been permanently conserved in the community as a result of the voluntary actions of landowners? If so, what are the stories behind those actions and who was involved?
- ✓ Have such voluntary actions received community recognition and how are such properties used today?



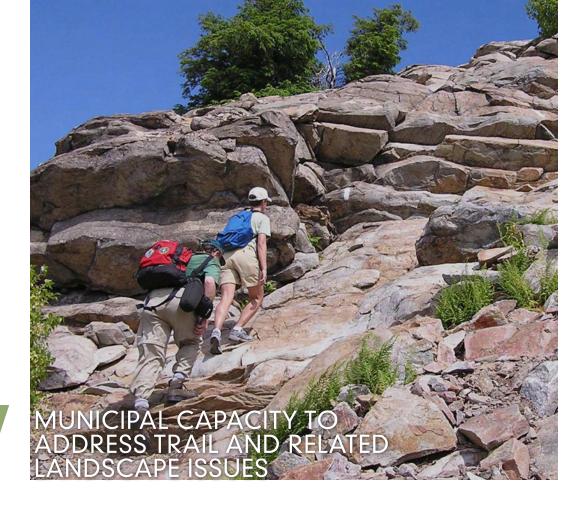
KNOWLEDGE OF KEY LANDOWNERS

- ✓ To what extent are municipal officials familiar with owners of key properties of conservation interest to the community and the Trail? Can it identify key landowners who should be contacted because of pending or recent decisions to sell or develop their properties?
- ✓ Is it known whether certain landowners would consider the possibility of conserving all or portions of their holdings, if their financial and other objectives were met?



OPPORTUNITIES FOR LANDOWNER OUTREACH

- ✓ Has the municipality recently or currently been involved in an outreach effort to work with key landowners? If not, would it be prepared to do so, possibly in collaboration with a land trust? Is it familiar
 with a particular land trust that it might work with?
- ✓ Is the municipality prepared to assume ownership or accept conservation easements for key properties? Does the municipality have access to potential funding sources for such purposes?



The municipality has the capacity to address various issues associated with the Trail because of the knowledge and interests of its elected officials, staff, or volunteer commissions and committees. It takes advantage of educational opportunities to stay up-to-date on "best practices" related to growth management, land use regulations and resource protection. As needed, it has access to professional expertise through its relationships with the county planning commission, consultants and nonprofit conservation organizations. It shares information with neighboring municipalities through which the Trail passes.

Protecting the Trail and its related landscapes requires local knowledge and the sustained interest and commitment of the Trail's communities. The majority of those communities are small with limited budgets and they do not have the resources of larger communities. They particularly depend upon the personal interests and available time of their elected officials, planning commissions and other volunteer committees.

A review of municipal capacity is an important part of the Act 24 assessment process, in that such information is needed to understand the extent to which a community is able and willing to address the assessment's findings. Although it does require some technical expertise, the assessment itself is not particularly complicated. However, some of the follow-up actions

may require additional expertise beyond the capacity of many municipalities to achieve on their own. Therefore, an understanding of a municipality's capacity is essential in designing a realistic municipal strategy to address the Trail's needs, as well as the extent to which outside assistance may be needed.



MUNICIPAL INTERESTS AND CAPABILITIES

- ✓ How familiar are the municipality's elected officials, planning commission or other appointed bodies
 with the Trail and the issues raised by its Act 24 assessment?
- ✓ Who would most logically assume responsibility in following-up actions? For example, would it be the Board of Supervisors, the Planning Commission, the Environmental Advisory Council or an ad hoc committee?

7.2

ACCESS TO TECHNICAL ASSISTANCE

- ✓ Would the municipality be willing to work with the county planning commission and possibly other Trail communities in addressing issues raised by its Act 24 assessment?
- ✓ If it had funds for such purposes, would the municipality consider retaining its solicitor, a planning consultant or nonprofit conservation organization for professional services?

DEVELOPING A CONSERVATION STRATEGY FOR THE TRAIL

The following outline of a potential conservation strategy is intended to illustrate a potential outcome of the Act 24 assessment methodology for a single municipality.

0	UTLINE FOR A COMMUNITY (CONSERVATION STRATEGY - ILLUSTRATIVE ONLY
	PRINCIPLE	ACTION
1	Local Recognition of the Trail	 Amend Comprehensive Plan to recognize the Trail and its related landscapes Work with the Appalachian Trail Conservancy and local trail club to improve Trail access and promote local awareness
2	Trail-Related Landscapes and Their Susceptibility to Change	Further analysis of key land parcels comprising Trail- related landscapes
3	Zoning Applicable to the Trail and Its Related Landscapes	 Amend zoning to add resource protection overlay districts Adopt regulations to further protect narrow sections of the Trail's corridor
4	Mandates and Incentives for Conservation Design	 Educational tour of existing nearby conservation design subdivisions Amend regulations to further encourage conservation design
5	Regulating High Impact Uses	Amend regulations to add performance standards for wind turbines and trucking terminals
6	Working Relationships with Key Landowners	Develop landowner outreach initiative in partnership with local land trust
7	Municipal Capacity to Address the Trail and Related Land- scape Issues	 Assign Environmental Advisory Council the responsibility for overseeing a conservation strategy for the Trail Work with County Planning Commission to receive ongoing technical assistance

FOOTNOTES

- 1. Act 24 is an amendment to the 1978 Pennsylvania Appalachian Trail Act enacted April 28, 1978 (P.L. 87, No. 41), authorizing the PA Department of Environmental Conservation and Natural Resources to acquire an interest in lands, as may be necessary, to establish, protect and maintain the Appalachian Trail. More specifically, the Department is authorized to enter into written cooperative agreements with political subdivisions, landowners, private organizations and individuals and to acquire by agreement, gift, eminent domain or purchase, land, rights-of-way and easements for the purpose of establishing, protecting and maintaining the Appalachian Trail across Pennsylvania, under such terms and conditions, including payment by the department in lieu of property taxes on trail lands or property in accordance with the Forest Reserves Municipal financial Relief Law. In the event of acquisition by eminent domain of land other than tillable farmland, the Act limits the total amount of land to be acquired to not exceed an average of 125 acres per mile of trail.
- 2. Task Force members represented....complete
- 3. Paul R. Lehman, Blue Mountain Eagle Climbing Club Keepers of the Appalachian Trail, The Historical Society of Berks County website.
- 4. The estimated average population growth rate for all 58 municipalities is based upon applying projected county growth rates to 2000 Census estimates for municipalities within each county. The estimated average can be misleading given significant differences in growth rates among counties. For example, in the 2000-2030 period, Berks County is projected to grow by 31.7% whereas Schuylkill County is expected to lose 2.8% of its population. Source: Pennsylvania State Data Center Research Brief, November 3, 2008.
- 5. Based on a 2002-2003 survey for the Pennsylvania State Recreation Plan, which found that 66.8% of those interviewed participated in walking for pleasure/fitness. [Chapter 4, Table 4-1].



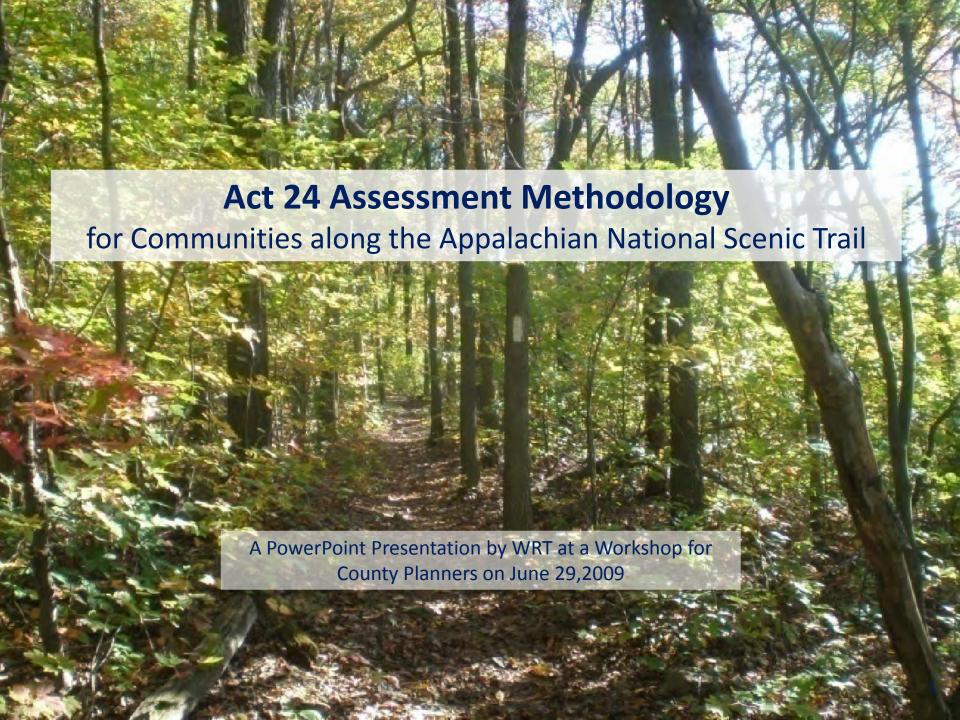


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COUNTIES AND MUNICIPALITIES

Pennsylvania Section of the Appalachian National Scenic Trail



WORKSHOP PURPOSES

- To introduce county professional planners to the Guidebook's assessment methodology
- To obtain <u>feedback</u> on the methodology and how it might be improved
- To review the extent to which county planning commissions and other professionals in the private and nonprofit sectors can provide <u>technical assistance</u>

OVERVIEW OF THE APPROACH

- Its major goal is to raise <u>community awareness</u> of the Trail and to provide a means for establishing <u>local priorities</u> to protect the Trail's <u>landscape experience</u>
- It uses a <u>holistic approach</u> to address multiple non-regulatory and regulatory issues, rather than relying upon one technique such as a model Trail corridor ordinance
- It seeks to provide explicit guidance while allowing for <u>flexibility</u> to address local circumstances and interests
- It envisions a <u>sustained community commitment</u> over time, rather than undertaking a one-time audit of community circumstances and practices
- It is intended to enable a community's "self-assessment," while recognizing that most communities will require <u>outside technical</u> assistance

CHALLENGES IN MAINTAINING THE TRAIL EXPERIENCE

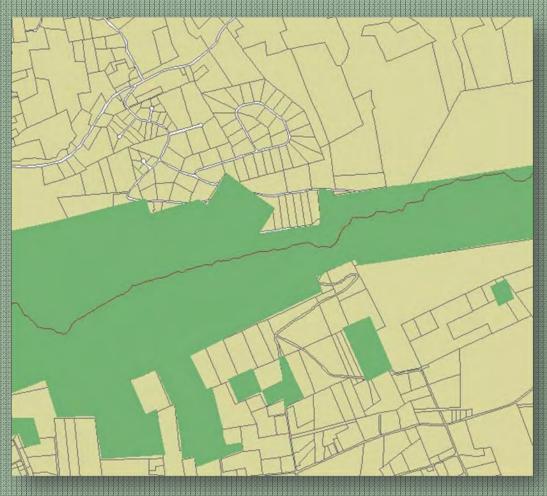
- A. A Protected Corridor that Varies in Shape and Size
- B. Diverse Circumstances of Adjacent Landowners
- C. Effectiveness of Municipal Land Use Controls
- D. The Trail's Expansive Views in a Developing Region
- E. Varying Trail Awareness and Access

A Protected Corridor that Varies in Shape and Size



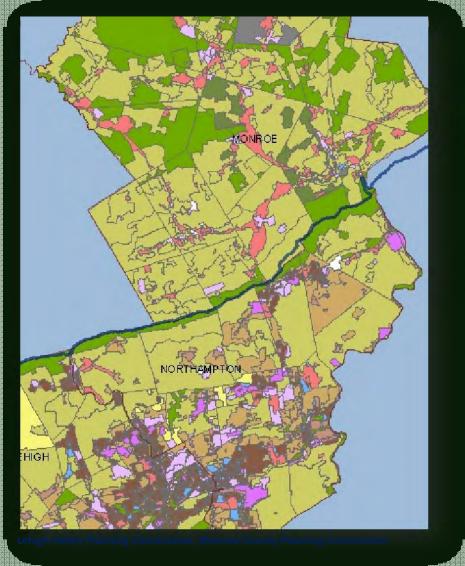
Challenges in Maintaining the Trail Experience

Diverse Circumstances of Adjacent Landowners

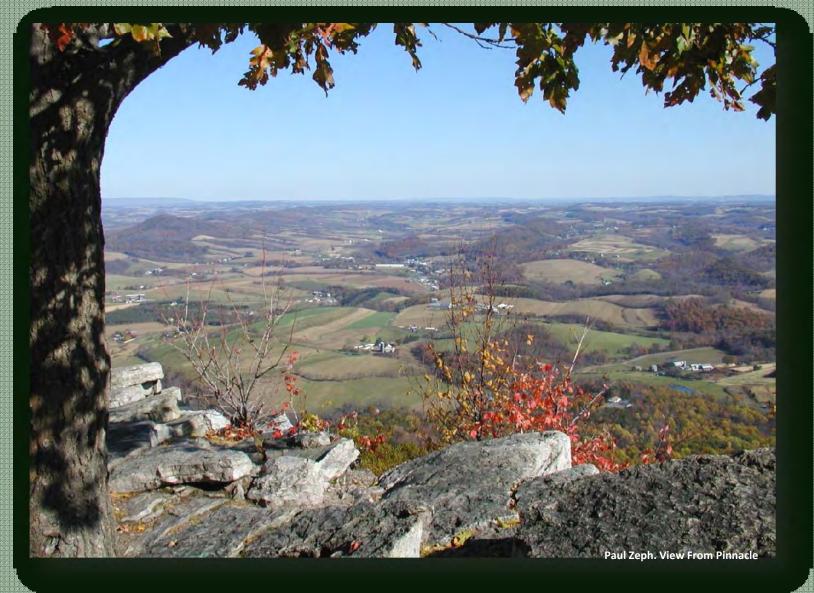


Effectiveness of Municipal Land Use Controls





The Trail's Expansive Views in a Developing Region



Varying Trail Awareness and Access



SEVEN CHARACTERISTICS OF EFFECTIVE TRAIL COMMUNITIES

- They <u>recognize</u> the Trail's national and local significance
- They have identified the Trail's <u>related landscapes</u> and their susceptibility to change
- Their zoning regulations are oriented towards landscape conservation
- They provide mandates and incentives for <u>conservation</u> <u>design</u>

- 5. Their regulations address potentially high impact uses
- 6. They work effectively with <u>key</u>
 <u>landowners</u> willing to
 consider conservation options
 for their lands
- 7. They have the <u>capacity and</u>
 <u>interest</u> to address Trailrelated issues on a long-term
 basis

A CHECKLIST FOR COMMUNITY SELF-ASSESSMENTS

Based Upon the Seven Characteristics of Effective Trail Communities

Local Recognition of the Trail Trail Related Landscapes Landscape Based Zoning Conservation Design Potentially High Impact Uses Key Landowners Municipal Capacity

Checklist Organization

1.0	Local Recognition of the Trail and Its Significance		
1.1	Local Access and the Trail Experience		
1.2	Recognition in the Comprehensive Plan		
1.3	Actions to Enhance Community Appreciation of the Trail		
2.0	Trail-Related Landscapes and Key Parcels		
2.1	Landscapes Contributing to the Trail Experience		
2.2	Patterns of Current Ownership and Use		
2.3	Identification Key Parcels		
3.0	Zoning for Landscape Protection		
3.1	Applicability of Base Zoning to the Trail and Its Related Landscapes		
3.2	Standards and Overlays to Protect Specific Resource Features		
3.3	Regulations Addressing Narrow Sections of the Trail's Protected Corridor		
4.0	Mandates and Incentives for Conservation Design		
4.1	Local Experience with Conservation Design		
4.2	Current Conservation Design Standards		

Checklist Organization

5.0	Regulating Potentially High Impact Uses
5.1	Current Uses and Future Prospects
5.2	Adequacy of Current Regulations
6.0	Working Relationships with Key Landowners
6.1	Community History of Voluntary Land Conservation
6.2	Knowledge of Key Landowners
6.3	Potential for Landowner Outreach
7.0	Municipal Capacity to Address Trail and Related Landscape Issues
7.1	Municipal Interests and Capabilities
7.2	Access to Technical Assistance

Illustrative Outcome of a Community Assessment

Principle 1 - Recognizing the Trail and Its Related Landscapes					
1.1. Goals and Policies in the Comprehensive Plan	Potential Action				
1.2. Consistency with County and Regional Plans	Good				
Principle 2 - Assessing Landscape Resources and Conservation Needs					
2.1. Municipal Access to Resource Information	Potential Action				
2.2. Assessing Resources and Their Vulnerability	Potential Action				
2.3. Designating Priority Conservation Areas	Potential Action				
Principle 3 - Zoning to Achieve Resource Conservation Goals					
3.1. Base Zoning Districts with a Resource Protection Emphasis	Potential Action				
3.2. Resource Protection Standards and Zoning Overlays	Potential Action				
3.3. Regulations Focused on the Protection Needs of the Appalachian Trail	Potential Action				
Principle 4 - Providing Mandates and Incentives for Conservation Design					
4.1. Regulations Requiring or Encouraging a Conservation Design Process	Good				
4.2. Incentives for Conservation Design	Good				
Principle 5 - Regulating Potentially High Impact Uses					
5.1. General Stands for Noise, Glare and Landscape Buffers	Potential Action				
5.2. Regulations for Specific Uses	Potential Action				
5.3. Requirements for Environmental Impact Statements	Good				
Principle 6 - Assisting Landowners and Obtaining Their Support					
6.1. Keeping Landowners Informed and Responding to Their Concerns	Adequate				
6.2. Working with Conservation Organizations in Landowner Outreach	Potential Action				
Principle 7 - Capacity Building Through Volunteerism, Collaboration and Education					
7.1. Volunteer Commissions and Advisory Committees	Potential Action				
7.2. Collaborating with Neighboring Municipalities	Potential Action				
7.3. Participating in County and Regional Conservation Programs and Initiatives	Adequate				
7.4. Taking Advantage of Opportunities for Education and Training	Adequate				

Illustrative Organization of an Action Plan

	Checklist	Action Elements
1	Local Recognition of the Trail	
2	Trail-Related Landscapes and Their Susceptibility to Change	
3	Zoning Applicable to the Trail and Its Related Landscapes	
4	Mandates and Incentives for Conservation Design	
5	Regulating High Impact Uses	
6	Working Relationships with Key Landowners	
7	Municipal Capacity to Address the Trail and Related Landscape Issues	

LOCAL RECOGNITION OF THE TRAIL AND ITS SIGNIFICANCE

Guiding Principle No. 1

The community is aware of the Trail's significance as a National Scenic Trail and recognizes that the landscapes within its jurisdiction contribute to the quality of the Trail experience.

It also recognizes the Trail as a community asset and has adopted policies to protect the Trail and its related landscapes in its Comprehensive Plan or other planning documents.

Local Recognition of the Trail

Trail Related Landscapes

Landscape Based Zoning

Conservation Design

Potentially High Impact Uses

Key Landowners

Municipal Capacity

Commentary

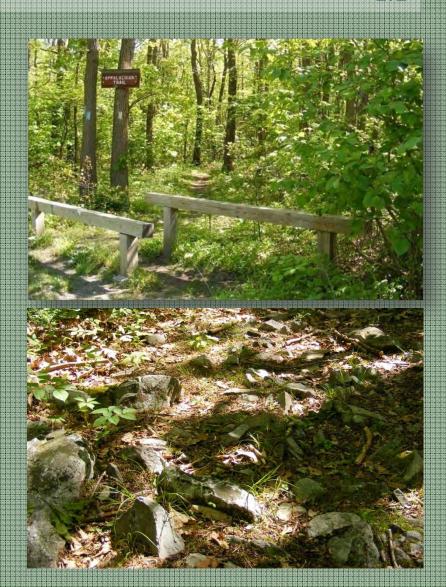
Local awareness and appreciation of the Trail are important to a <u>municipality's willingness</u> to take actions to protect it.

Important <u>indicator</u>s are ease of Trail access, walking conditions and local perceptions regarding risks in using the Trail.

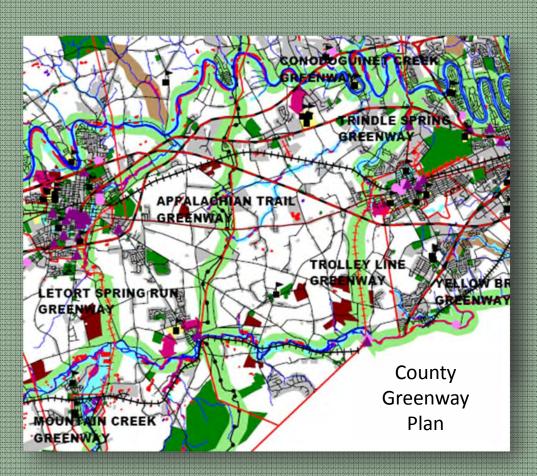
Recognition of the Trail in the municipality's Comprehensive Plan or other planning documents is important as a <u>public policy</u> statement that provides the basis for regulatory and other actions.

In addition to being descriptive, such documents should ideally identify Trail issues particular to the community.

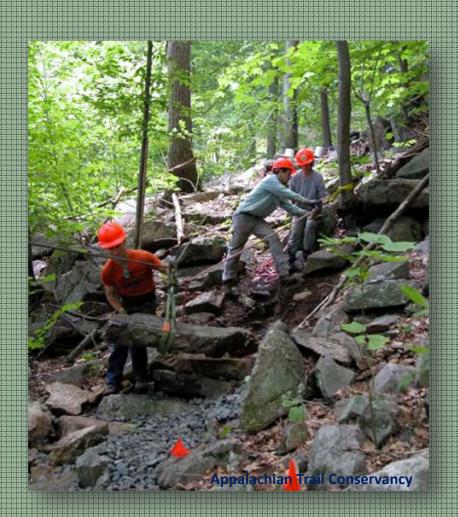
- ✓ Ease of Trail access?
- ✓ Trail experience?
- ✓ Connections with other trails?
- ✓ Who uses the Trail?



- ✓ Trail policies?
- ✓ Greenway policies?
- ✓ Landscape conservation policies?
- ✓ Recognition of county plans?



- ✓ Improve access?
- ✓ Improve trail conditions?
- ✓ Educational programs?
- ✓ Organized outings?



UNDERSTANDING TRAIL-RELATED LANDSCAPES

Guiding Principle No. 2

The municipality has identified lands contributing to the Trail's landscape experience and it has assessed patterns and trends in their ownership and use.

It has identified key properties whose future ownership and use could impact the Trail.

Local Recognition of the Trail

Trail Related Landscapes

Landscape Based Zoning

Conservation Design

Potentially High Impact Uses

Key Landowners

Municipal Capacity

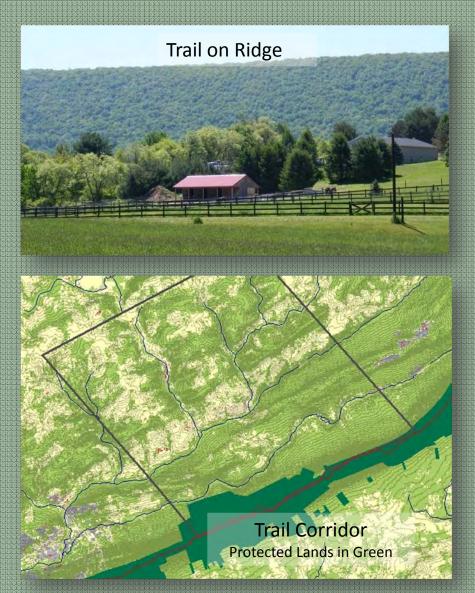
Commentary

The <u>landscape experience</u> of being on the Trail is associated with the character of the lands through which it passes. Such landscapes are likely to be important to a community for reasons beyond their association with the Trail.

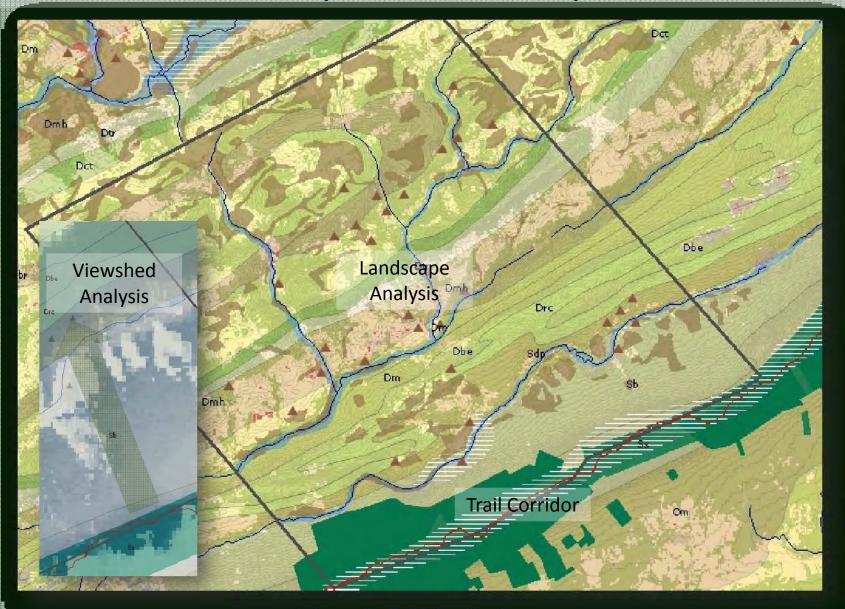
Landscape assessment involves identifying: (a) landscapes associated with the Trail, (b) current patterns of land ownership and use, and (c) key properties

It requires field observations and technical expertise which many municipalities may not have in-house but which is available from county planning departments or other planning professionals in the private and nonprofit sectors.

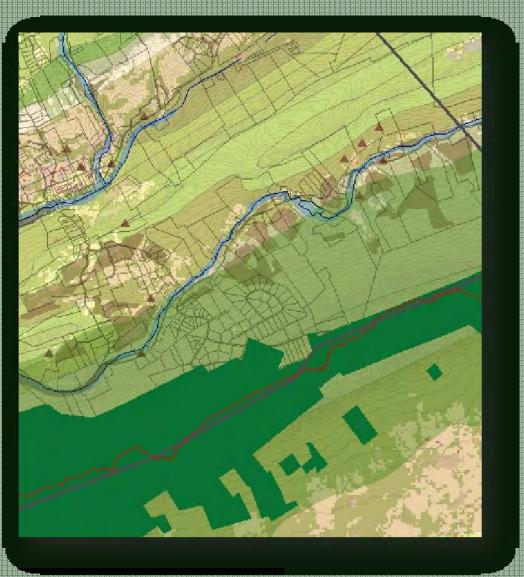
- ✓ What are the landscapes through which the Trail passes?
- ✓ What is the landscape experience when walking along the Trail, and how would that vary between seasons with and without foliage?
- ✓ Is the municipality able to acquire, organize and display map layers that accurately portray lands associated with Trail's landscape experience?



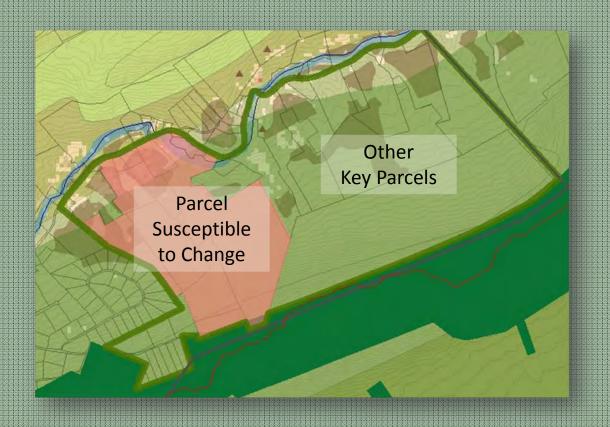
Landscape Assessment – Example



- ✓ To what extent is the Trail's landscape experience protected by lands already in public or nonprofit ownership along the Trail corridor?
- ✓ What is the pattern of land ownership, parcel size and use of the Trail's related landscapes outside of its currently protected corridor?



✓ Are there key parcels that could adversely impact the Trail's landscape experience?



ZONING REGULATIONS APPLICABLE TO THE TRAIL AND ITS RELATED LANDSCAPES

Guiding Principle No. 3

The municipality is using its zoning powers to help protect landscapes associated with the Appalachian Trail and other greenways within its jurisdiction.

It has adopted performance standards and overlay districts to protect specific resource features.

Its zoning regulations also contain standards that control incompatible uses on lands adjacent to the Trail corridor.

Section 4 of Act 24 specifically requests municipalities to use their zoning powers, as they deem necessary, to preserve the natural, scenic, historic and esthetic values of the trail and to conserve and maintain it as a public natural resource.

Local Recognition of the Trail

Trail Related Landscapes

Landscape Based Zoning

Conservation Design

Potentially High Impact Uses

Key Landowners

Municipal Capacity

Commentary

No <u>one-size-fits-all</u> zoning ordinance would be universally applicable to address the diverse circumstances of municipalities along the Trail.

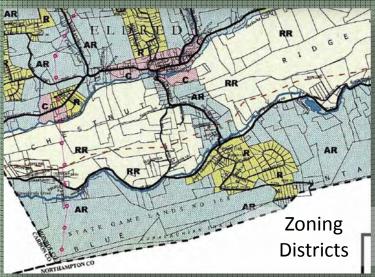
The results of the <u>landscape analysis</u> provide the basis for reviewing base zoning districts.

Zoning regulations should contain performance standards to protect <u>specific resource features</u> within those landscapes, such as woodlands and steep slopes, and, where appropriate, such features be designated as overlay districts.

This principle includes consideration of specific zoning provisions to address <u>narrow sections of the Trail's protected corridor</u>. Such provisions may be incorporated into base zoning or treated as a special trail overlay district, as currently used by several municipalities along the Trail.

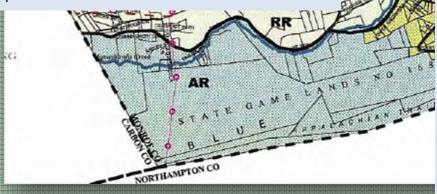
- ✓ Current zoning districts encompassing the Trail's related landscapes?
- ✓ Consistency with municipal conservation policies?
- ✓ Cumulative "build-out" impacts of development affect the Trail's related landscapes?
- ✓ What kinds of zoning amendments could possibly reduce such impacts?





AR Agricultural/Residential District

To permit, protect and encourage the continued use of land for agriculture and forestry enterprises, while concurrently allowing lower density residential development, limited recreational uses and certain institutional uses. A number of other limited non-agricultural uses are permitted to enable the owners of large parcels of land to realize reasonable income from their property, thereby forestalling its sale for development.



Principal Permitted Uses

Agriculture and retail sales
Commercial greenhouses and nurseries
Conservation design subdivisions
Forestry enterprises and retail sales
Group homes
Single and two-family dwellings

Conditional Uses (partial list)

Aircraft sales, repairs
Airports
Recreational vehicle parks
Mobile home parks
Multi-family dwellings

Minimum Lot Sizes

- 2.0 acres on-site sewage & water
- 2.0 acres on-site sewage & central water
- 2.0 acres central sewage & on-site water
- 1.0 acres central sewage & central water

- ✓ Does the municipality's zoning ordinance contain standards to protect specific resource features associated with the Trail's related landscapes?
- ✓ Do the standards appear to be reasonable and sufficient to serve their intended purposes
- ✓ To what extent is the municipality using zoning overlay districts to depict the locations of resource features?



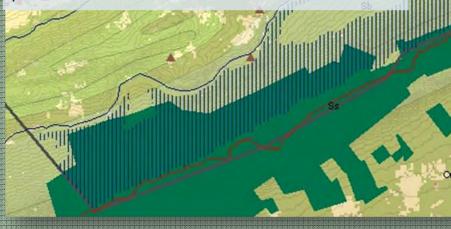
Analysis of Resource Protection Standards – Example

704 Special Conservation Standards

All uses permitted by this Ordinance shall be subject to the following special conservation performance standards which shall apply to any lands that are characterized as steep slopes, wetlands or flood plains.

704.1 Steep Slope Areas

Steep slopes shall be defined as slopes in excess of 25% grade. ... Any use or development of such steep slope areas shall be considered a conditional use, and in reviewing applications for use of sites partially or wholly included within an steep slope area, the Board of Supervisors and Planning Commission shall be satisfied that the following performance standards have been or will be met....



704.2 Buffers for Wetlands and Vernal Pools

If the Township determines that wetlands or vernal pools may be present or may be impacted by the proposed development, the Township may require wetlands and vernal pools to be delineated on any application proposing a new use or expanded use of land.

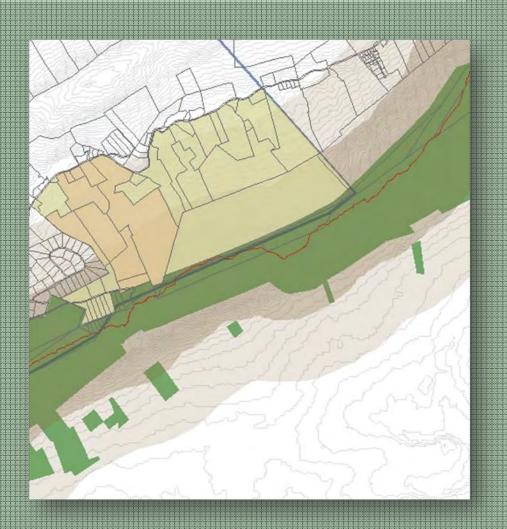
704.4 Wellhead Protection Zones

This ordinance is divided into specific wellhead protection overlay zones: Zone 1 - All land within 400 feet of any public water supply wells; Zone 2 - All land within one-half mile of public water supply wells and within 50 feet of any 1---year floodplain, wetland or natural water body; Zone 3. All remaining land within the Township.

706.1 Natural Vegetation

to minimize soil erosion and storm water run-off, and to preserve the rural character of the Township, natural vegetation shall be maintained to the greatest extent possible. Standards limit clearing of vegetation to areas needed for site improvements and require all-season groundcover and landscaping. Additional requirements may be placed on conditional use applications.

- ✓ Are there narrow corridor sections where the Trail may be particularly vulnerable to incompatible uses?
- ✓ Does the zoning ordinance contain standards to protect narrow corridor sections?
- ✓ Do such standards apply to building sizes and setbacks, and requirements for visual buffers?



401.5 Appalachian Trail Overlay District

District Boundaries

1,000 feet on each side of the Trail, as designated by the Appalachian Trail Conservancy.

Buffer

Structures prohibited within 100 feet of the Trail corridor owned by the National Park Service. Any structure permitted by variance within the buffer shall be screened in accord with section 701.1.

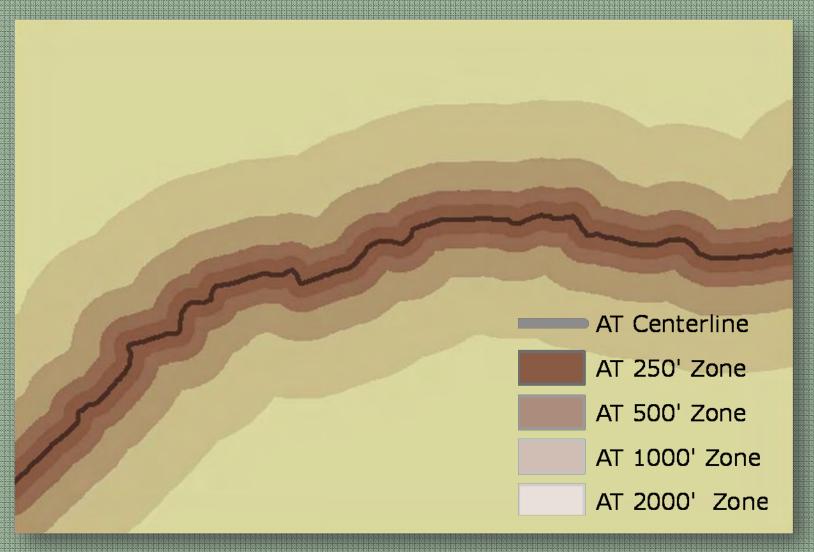
Existing Vegetation

No disturbance except for maintenance, correction of hazardous conditions or removal of invasive species, or as otherwise approved by the Township. Trees may be harvested, provided basal area is not reduced below 50 percent of the area present before cutting or below 65 square feet per acre, whichever is higher.

Conditional Use

Except for forestry, any nonresidential use within 1,000 feet of the Trail, shall be a conditional use.





MANDATES AND INCENTIVES FOR CONSERVATION DESIGN

Principle No. 4

The municipality's zoning and subdivision regulations contain mandates and incentives to encourage "conservation design" of residential subdivisions.

It recognizes that conservation design provides opportunities for protecting landscapes and creating interconnected greenways through the development process.

Local Recognition of the Trail

Trail Related Landscapes

Landscape Based Zoning

Conservation Design

Potentially High Impact Uses

Key Landowners

Municipal Capacity

Conservation Design Concepts



Commentary

To be effective, a municipality's zoning ordinance must contain provisions that make conservation design an <u>attractive option</u> to conventional subdivisions. For example, regulations must be drafted so they are not unnecessarily complicated.

It also requires support of informed <u>landowners and developers</u> having sufficient comfort with the concept and its economic feasibility, as well as an understanding that it may require additional planning considerations.

Subdivision and land development regulation should provide a process by which an applicant makes a careful analysis of on-site resources, prepares a <u>resource conservation plan</u>, and uses that plan as important input to the site development plan for buildings, lots and streets.

A municipality's strong encouragement of <u>sketch plan</u> submissions for conservation designs will be beneficial to the municipality and the applicant.

Local Experience with Conservation Design

4.1

- ✓ Municipal familiarity with conservation design?
- ✓ Municipal experience with landowners and developers?
- ✓ Examples of successful conservation design projects?



Current Standards for Conservation Design

4.2

- ✓ Provisions for a conservation design option?
- ✓ Incentives allowing flexible lot sizes, diverse housing types and providing density bonuses?
- ✓ Requirements for a conservation design process?
- ✓ Policies towards sketch plan submissions?

Assessment of Conservation Design Provisions - Example

Article VI Residential Standards

601 Conservation Design Overlay District

- 601.1 Purposes and Development Options
- 601.2 General Regulations
- 601.3 Minimum Parcel Size and Use Regulations
- 601.4 Density and Dimensional Standards
- 601.5 Design Standards for Options 1 and 2
- 601.6 Open Space Use and Design Standards
- 601.7 Permanent Open Space Protection

302 Sketch Plan

302.1 Optional - Sketch Plans*

Applicants are VERY STRONGLY ENCOURAGED, but not required to submit a Sketch Plan to the Planning Commission prior to the submission of a Preliminary Plan, Land Development Plan or Minor Plan.

The <u>critical part of the Sketch Plan review process</u> is to lay the Sketch Plan on top of the Existing Resources and Site Analysis Plan, prepared in accord with the requirements of 402.3, to determine the extent to which the proposed layout of conservation areas, streets, and building lots succeeds in designing around and conserving significant site features. The Sketch Plan shall be prepared on paper and translucent material and at the same scale as the Existing Resources/Site Analysis Map.

*Emphasis as presented in the SALDO

REGULATING POTENTIALLY HIGH IMPACT USES

Principle No. 5

In addition to its general regulations for controlling noise, visual and other environmental impacts, the municipality's zoning regulations address potentially high impact uses such as wind energy turbines, cell towers, major truck terminals extractive industries and ski areas

Local Recognition of the Trail

Trail Related Landscapes

Landscape Based Zoning

Conservation Design

Potentially High Impact Uses

Key Landowners

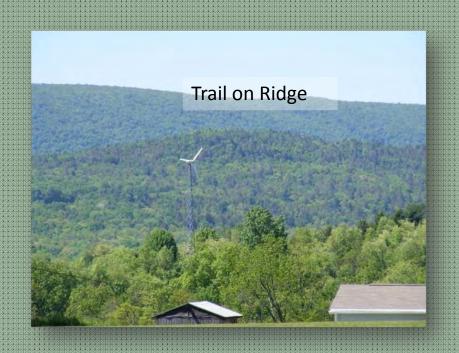
Municipal Capacity

Commentary

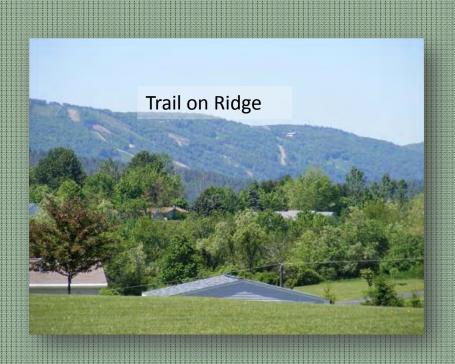
Municipalities should <u>identify potentially high impact</u> uses of current or potential concern, followed by a determination of the extent to which they are adequately covered in their existing regulations.

Of particular interest is whether current regulations would permit uses that could have <u>major impacts on the Trail</u>, and the extent to which the Trail would be considered in the municipality's review of applications for such uses.

- ✓ Does the municipality currently have wind turbines, large warehouses, quarries, ski areas or other similar potentially high impact uses?
- ✓ If so, how have they affected the community and the Trail?
- ✓ Does the municipality
 anticipate expanded or new
 potentially high impact uses
 that could impact the
 community and the Trail?



- ✓ Current general regulations pertaining to noise, lighting, pollutant emissions and other issues that apply to all land uses?
- ✓ Current regulations pertaining to potentially high impact uses?
- ✓ Relationship of current regulations to the Trail?
- ✓ Requirements environmental impact statements?



Assessment of General Regulations – Example

701.2 Landscaping

A landscaping plan for the proposed project shall be submitted by the developer for review and approval by the Township. Where the project involves landscaping of more than one-half acre, the plan shall be prepared by a qualified registered landscape architect, professional planner or registered professional engineer....

701.6 Noise

No person shall operate or cause to be operated, on property, any source of continuous sounds any sound that is stead, fluctuating, or intermittent with a recurrence greater than one time in any fifteen second interval) in such a manner as to create a sound level that exceeds the limits set forth for the receiving land use category....

701.8 Lighting and Glare

The standards of this section shall apply to all uses including residential and agricultural. Lighting shall be controlled in both height and intensity to maintain community character, and lighting design should be an inherent part of the project design. The standards of the Illuminating Engineering Society shall be used as a guideline for the said design.

706 Property Line Buffer Areas

It is the intent of this section to preserve the rural character of the Township by requiring the conservation of trees and other vegetation, especially during the land development process, and by requiring property line buffers... This section is not intended to prescribe specific cutting practices; or to prevent or hinder any landowner from realizing financial return from the sale of trees; or to prevent or hinder commercial tree harvests from operating in the Township.

Assessment of Regulations for Potentially High Impact Uses - Example

Article VIII Standards for Specific Uses

801 Adult Businesses

803 Agricultural Uses - Crop Production and

Livestock

804 Airports and Heliports

805 Amusement Parks

806 Animals, Keeping of

808 Bulk Fuel Storage Facilities

809 Commercial Communication Devices

810 Concentrated Animal Feeding Operations

813 Detention Facilities

815 Forestry Enterprises

820 Junk Yards

825 Mineral Extraction

841 Self-Storage Facilities

844 Shooting Ranges and Archery Ranges

845 Shopping Centers and Malls

848 Solid Waste

850 Storage Yard for Forest Products and Stone

851 Swimming Pool, Commercial

853 Treatment Centers/Clinics, Medical Offices

856 Vehicle Related Uses

858 Wind Farms

815 Forestry Enterprises

815.1 Permit Required

815.2 Soil Erosion and Storm Water

815.3 Best Management Practices

815.4 Township Road Bond

815.5 Access to Public Roads

815.6 Setbacks

856 Vehicle Related Uses

856.1 Car and Truck Wash Facilities

856.2 Gasoline Stations and Vehicle Repair

856.3 Vehicle or Equipment Sales Operations

856.4 Race Tracks

858 Wind Farms

858.1 Purposes

858.2 Permits: Use Regulations

858.3 Standards

Assessment of Environmental Impact Statement Provisions – Example

703 Environmental Impact Statement

The intent of this section is to provide the identification of environmental and community impacts and means of mitigation of impacts of development projects in the Township. The Board of supervisors, Planning Commission, or Zoning Hearing Board, as the case may be, may, based upon the nature of a project and potential impacts on the Township, require the developer to prepare and submit to the Township an environmental impact statement (EIS) for the following types of developments and uses:

- 1. Industrial parks
- 2. Light manufacturing or industrial uses
- 3. Junkyards
- 4. Mineral extraction
- 5. Mineral processing
- 6. Agricultural products processing
- 7. Solid waste facilities and staging areas
- 8. Warehouses and trucking terminals
- 9. Concentrated animal feeding operations
- 10. Any use involving the initial or cumulative disturbance of 87,120 or more square feet of soil surface areas
- 11. Any use involving the initial or cumulative construction, installation and/or placement of 43,560 square feet or more of buildings, structures or other impervious surface areas
- 12. Any use involving development in any flood plain areas

WORKING RELATIONSHIPS WITH KEY LANDOWNERS

Principle No. 6

The municipality is prepared to work with key landowners currently or potentially interested in conservation and/or limited development plans for their properties.

It is also willing to collaborate with a qualified land trust in such efforts.

Local Recognition of the Trail

Trail Related Landscapes

Landscape Based Zoning

Conservation Design

Potentially High Impact Uses

Key Landowners

Municipal Capacity

Commentary

Individual <u>landowner decisions</u> are usually the driving force behind the timing, location and types of land use change.

A municipality can become proactive and have a <u>positive</u> <u>influence on landowners</u> if it becomes involved at a sufficiently early stage.

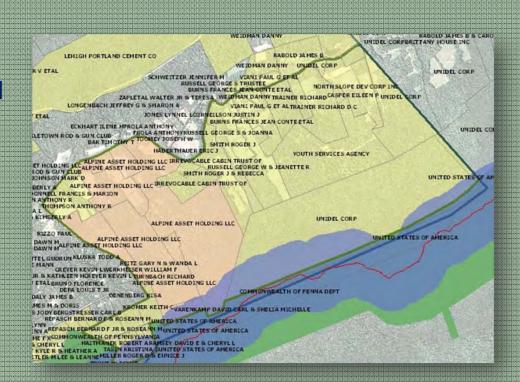
A <u>qualified land trust</u> can provide professional assistance to landowners who wish to consider various options for their properties, and they can serve as an intermediary between landowners and a municipality.

A municipality and land trust are likely to be most effective when they have <u>access to funds</u> enabling them, if necessary, to acquire all or parts of a key property for conservation purposes.

- ✓ Have properties been permanently conserved in the community as a result of the voluntary actions of landowners?
- ✓ If so, what are the stories behind those actions and who was involved?
- ✓ Have such voluntary actions received community recognition and how are such properties used today?



- ✓ Familiarity with owners of key properties of conservation interest to the community and the Trail?
- ✓ Knowledge of key landowners who should be contacted because of pending or recent decisions to sell or develop their properties?



- ✓ Municipal experience in working with landowners on conservation issues?
- ✓ Municipal willingness to outreach to key landowners?
- ✓ Municipal readiness to work collaboratively with a land trust?
- ✓ Municipal access to funds for purchase of fee-interest or conservation easements?



Courtesy of Natural Lands Trust Inc.

MUNICIPAL CAPACITY TO ADDRESS TRAIL AND RELATED LANDSCAPE ISSUES

Principle No. 7

It has the capacity to address various issues associated with the Trail because of the knowledge and interests of its elected officials, staff, volunteer commissions and committees.

It takes advantage of educational opportunities to stay up-to-date on "best practices."

It has access to professional expertise through its relationships with the county planning commission, consultants and nonprofit conservation organizations.

Local Recognition of the Trail

Trail Related Landscapes

Landscape Based Zoning

Conservation Design

Potentially High Impact Uses

Key Landowners

Municipal Capacity

Commentary

A review of municipal capacity is an important part of the Act 24 assessment process, in that such information is needed to understand the extent to which a <u>community is able and willing</u> to address the assessment's findings.

Although it does require some <u>technical expertise</u>, the assessment itself is not particularly complicated. However, some of the follow-up actions may require additional expertise beyond the capacity of many municipalities to achieve on their own.

Therefore, an understanding of a municipality's capacity is essential in designing a realistic <u>municipal strategy</u> to address the Trail's needs, as well as the extent to which outside assistance may be needed.

Municipal Interests and Capabilities

Checklist Questions

- ✓ How familiar are the municipality's elected officials, planning commission or other appointed bodies with the Trail and the issues raised by its Act 24 assessment?
- ✓ Who would most logically assume responsibility in following-up actions? For example, would it be the Board of Supervisors, the Planning Commission, the Environmental Advisory Council or an ad hoc committee?

Elected Officials

Zoning Officer

Planning Commission

Environmental Advisory Council

Other Appointed Committees

- ✓ Would the municipality be willing to work with the county planning commission and possibly other Trail communities in addressing issues raised by its Act 24 assessment?
- ✓ If it had funds for such purposes, would the municipality consider retaining its solicitor, a planning consultant or nonprofit conservation organization for professional services?

Municipal Solicitor

County Planning Commission

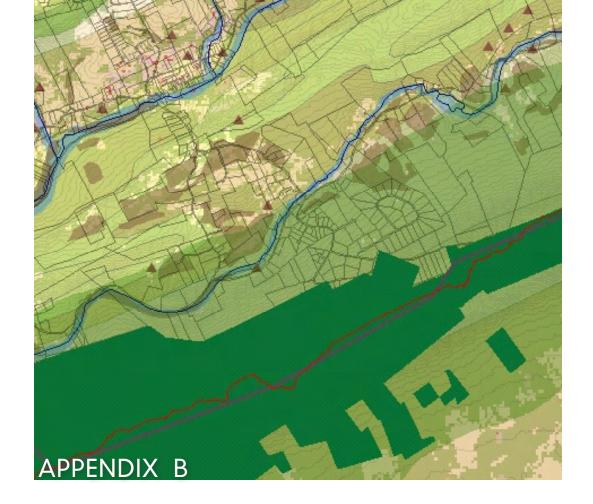
Planning Consultant

Nonprofit Conservation Organizations

Illustrative Conservation Strategy

1	Principle Local Recognition of the Trail	Action Amend Comprehensive Plan to recognize the Trail and its related landscapes Work with the Appalachian Trail Conservancy and local trail club to improve Trail access and promote local awareness
2	Trail-Related Landscapes and Their Susceptibility to Change	Further analysis of key land parcels comprising Trail-related landscapes
3	Zoning Applicable to the Trail and Its Related Landscapes	Amend zoning to add resource protection overlay districts Adopt regulations to further protect narrow sections of the Trail's corridor
2	Mandates and Incentives for Conservation Design	Educational tour of existing nearby conservation design subdivisions Amend regulations to further encourage conservation design
į	Regulating High Impact Uses	Amend regulations to add performance standards for wind turbines and trucking terminals
(Working Relationships with Key Landowners	Develop landowner outreach initiative in partnership with local land trust
5	Municipal Capacity to Address the Trail and Related Landscape Issues	Assign Environmental Advisory Council the responsibility for overseeing a conservation strategy for the Trail Work with County Planning Commission to receive ongoing technical assistance





Model Appalachian National Scenic Trail Overlay District

Prepared by Wallace Roberts & Todd; Revised 11/9/09

ORDINANCE NO OF 2009
AN ORDINANCE OF TOWNSHIP AMENDING THE
TOWNSHIP ZONING ORDINANCE OF, AS HERETOFORE
AMENDED, BY ADOPTING AN "APPALACHIAN TRAIL OVERLAY
DISTRICT," DESIGNED TO (i) COMPLY WITH ACT 24 OF 2008 AND (ii) ADD
ADDITIONAL PROTECTIONS TO THE PORTION OF THE APPALACHIAN
NATIONAL SCENIC TRAIL WHICH TRAVERSES THE TOWNSHIP.
UNDER AND BY VIRTUE OF THE AUTHORITY OF THE PENNSYLVANIA
MUNICIPALITIES PLANNING CODE, 53 P.S. SECTION 10101, ET. SEQ., AND
ACT 24 OF 2008, THE BOARD OF SUPERVISORS OF TOWNSHIP
DOES HEREBY ENACT AND ORDAIN THE FOLLOWING AMENDMENTS TO
THE TOWNSHIP ZONING ORDINANCE OF
Note:
This model overlay district is one of many tools described by "A Conservation Guidebook for Communities along the Appalachian National Scenic Trail." More information specific to base zoning, natural resource zoning districts, overlay districts, and performance standards is located in

Section 1. General Purposes

Section 3 of the Conservation Guidebook. http://www.apptrailpa.org

- a. Meet the Act 24 requirements that Pennsylvania municipalities along the Appalachian National Scenic Trail take such action consistent with applicable law, as at least an interim measure, to preserve the natural, scenic, historic, and aesthetic values of the Trail and to conserve and maintain it as a public natural resource.
- b. Protect important natural and historic resources by maintaining a natural resource buffer along the Appalachian Trail. This natural resource buffer is intended to provide a physical and visual screen from the impacts of new development along the Appalachian Trail.

Note: each municipality adopting this Overlay District may tailor its natural resource buffer based on local conditions and environmental resources. The natural resource buffer may be more specifically defined as woodlands, tree cover, steeps slopes, open space and fields, farmland, riparian resources, etc. based on the local context.

- c. Preserve the scenic and topographic conditions along the Appalachian Trail that are vital to the Trail's natural and scenic quality by maintaining the existing tree canopy and protecting viewsheds.
- d. Prevent negative noise, light, or other environmental impacts associated with land uses near the Appalachian Trail.
- e. Promote connections with municipal trails and greenways and integration with a community's natural resource system.
- f. Provide benefits to communities along the Appalachian Trail often associated with greenways (e.g., improve community health, increase recreational opportunities such as biking and hiking, and increase property values, etc.).

Section 2. Applicability. For any lot or portion thereof within the Appalachian Trail National Scenic Trail Overlay District, the regulations of the Overlay District shall take precedence over any regulations of the underlying district which are in conflict with those of the Overlay District.

Note: The Overlay District regulations do not cover all aspects of zoning, such as impervious cover limits. Therefore, certain provisions (e.g., area and bulk requirements) of the underlying district regulations will still be applicable.

Section 3. Primary Conservation Zone. A lot or property located within the Primary Conservation Zone as hereinbelow delineated shall be used only in accordance with the following regulations.

Note: The Primary Conservation Zone is intended to conserve the environmental, agricultural, and recreational resources and scenic quality of the land immediately surrounding the Appalachian Trail and protected corridor.

a. Delineation. A minimum width of ____ feet from the **protected corridor**, or feet from the **Appalachian Trail centerline** (as designated by the Appalachian Trail Conservancy), whichever is greater, or an area equal to the extent of steep slopes over 15% (or other natural features) measured from the Appalachian Trail Centerline.¹

Note: each municipality should determine an area appropriate for the Primary Conservation Zone on the basis of the municipality's review of natural features such as slopes, soils, vegetation, streams and existing land use patterns. A municipality has the option to choose either the distance

¹ Include language requiring that applicants accurately show the alignment of the Appalachian Trail and existing protected lands, at a level of accuracy acceptable to the municipality. An aerial photograph with GIS file showing the Trail alignment is recommended and available online from the Appalachian Trail Communities Network website.

method (e.g., minimum of 100' from the protected corridor, or 500' from the AT centerline) or an area defined by its review of natural features (e.g., steep slopes, agricultural soils, etc.). Within a borough or village setting the primary conservation zone may be quite narrow following a street or sidewalk.

b. Permitted Uses.

Note: each municipality can tailor this list based on local conditions and the width of the Primary Conservation Zone that is being regulated. Permitted uses may include:

- i. Open space, primarily passive recreational uses (e.g., public or private trail, parkland, nature preserves, forest preserves, fishing areas)
- ii. Forestry (without structures and as approved by the County Conservation District), reforestation, in accordance with the requirements of Section ____ of the Zoning Ordinance

Protecting Forestlands

Regulating forestry practices and preservation of trees is essential in many communities for protecting the environment of the Appalachian Trail. The MPC allows municipalities to regulate timber harvesting and other similar Forestry uses. See an excellent local example for protection/model woodlands regulations, Lehigh Valley Planning Commission.

Model Woodland Regulations

Note: Section 603(f) of the Pennsylvania Municipalities Planning Code mandates that "forestry activities, including but not limited to, timber harvesting, shall be a permitted use by right in all zoning districts in every municipality." That section of the MPC also states that "zoning ordinances may not unreasonably restrict forestry activities." This clause c.ii is intended to refer to the provision in the existing zoning ordinance of the municipality that regulates forestry activities in the municipality.

- iii. Agriculture (without structures)
- iv. No structures other than federal, state, or municipally-owned structures are permitted in the Primary Conservation Zone
- iii. Municipal uses
- **c. Prohibited Activities.** The following activities are prohibited within the Primary Conservation Zone.

Note: each municipality can tailor this list based on local conditions and the width of the Primary Conservation Zone. Prohibited activities may include:

- i. Clearing of vegetation, other than (i) maintenance by a federal, state, or municipal agency, the Appalachian Trail Conservancy (ATC), or Trail Club (partnered with the ATC), and (ii) permissible timber harvesting as authorized in subsection c.ii above
- ii. Storage of hazardous/noxious materials
- iii. Use of motor or wheeled vehicle traffic, except for agriculture, recreation, or forestry uses
- iv. Construction of parking lots, except for federal, state, or municipally-owned lots
- v. Construction of any type of permanent structure, except for federal, state, or municipally-owned structures
- vii. Installation of above-ground utilities including cell and wind towers
- viii. Other uses as defined by individual municipalities
- **Section 4. Secondary Conservation Zone.** A lot or property located within the Secondary Conservation Zone as hereinbelow delineated shall be used only in accordance with the following regulations.

Note: The Secondary Conservation Zone is intended to conserve the environmental, agricultural, and recreational resources and scenic quality of the land immediately surrounding the Primary Conservation District. Establishing a Secondary Conservation Zone is optional, but strongly recommended for each municipality adopting this overlay district. In rural locations conservation subdivision design with permanently preserved open space should be encouraged where appropriate. Within a borough or village setting the secondary conservation zone may be adjusted based on the local built environment and visibility from the Appalachian Trail.

a. **Delineation.** A minimum width of ____feet from the edge of the Primary Conservation Zone or an area equal to the extent of steep slopes over 15% (or other natural features) from the edge of the Primary Conservation Zone.

Note: Similar to the Primary Zone, each municipality should determine an area based on the municipality's review of natural features such as slopes, soils, vegetation, streams and existing land use patterns. A municipality has the option to choose either the distance method (e.g., 2,500' from the edge of the Primary Conservation Zone) or an area defined by its review of natural features (e.g., steep slopes). In a borough or village setting the zone may also be defined by the dimensions of an historic building pattern or maintaining the consistency of another physical feature (e.g., a wall, street or treeline)

b. Permitted Uses.

Note: Each municipality can tailor this list based on local conditions and the width of the Secondary Conservation Zone. Permitted uses may include:

For rural districts:

- Open space, primarily passive recreational uses (e.g., public or private parkland, nature preserves, forest preserves, fishing areas), reforestation, and steep slope stabilization
- ii. Forestry operations, as approved by the County Conservation District, in accordance with Section _ of the Zoning Ordinance.
- iii. Agricultural uses
 (municipality may consider
 limiting size of any
 structure) conducted in
 compliance with best
 practices as prescribed by
 the Pennsylvania
 Department of Agriculture

Note: Agriculture operations must have a current conservation plan or NRCS approved grazing 528 plan, an agricultural erosion and sedimentation control plan, and a nutrient management plan, if applicable for a CAO or CAFO.

iv. Residential Structures;permitted using theConservation SubdivisionDesign process and standards.

Note: Each municipality will need to include a definition and standards for Conservation Subdivision Design.

Conservation Subdivision Design

This type of residential development allows residential dwellings on smaller lots than otherwise permitted by base zoning in exchange for setting aside a significant portion of a development as open space. This approach achieves densities similar to conventional subdivisions through use of a compact development pattern and permanently preserves open space. The **four-step conservation design process** requires the applicant:

- Identify environmentally sensitive or other lands that should be permanently protected and identify potential development areas
- Locate housing units within the potential development area so that open space views are maximized
- 3) Connect future lots with streets and trails
- 4) Draw lot lines fronting street network

For an example see the Paradise Township Conservation Subdivision Ordinance at http://www.apptrailpa.org/tools/examples/4/Conservation%20Design ParadiseTownshipMonroeCounty.pdf

Traditional Neighborhood Development (TND)

TND promotes compact, mixed-use, pedestrian-friendly development patterns modeled after traditional American towns as an alternative to suburban style development. Typical TND characteristics include interconnected streets, buildings oriented toward the street, walkable streets with sidewalks and street trees, accessible public space, and mixed-use buildings (e.g., residential above office building).

For examples of successful TND Ordinances, see the Cranberry Township TND Overlay and Guiding Principles and the Lansdale TND Ordinance:

<u>Cranberry Township TND</u> Lansdale TND Ordinance v. Residential Structures; permitted by **conditional use** according to underlying zoning district

For borough or village locations:

- i. Open space, primarily passive recreational uses (e.g., public or private parkland, nature preserves, forest preserves, fishing areas), reforestation, steep slope stabilization
- ii. Residential Structures; permitted using Traditional Neighborhood Development standards
- iii. Commercial and Mixed-use structures; permitted using Traditional Neighborhood Development standards
- **c. Prohibited Activities.** The following activities are prohibited within the Secondary Conservation Zone.

Note: Each municipality has the option to tailor this list based on local conditions and the width of the Secondary Conservation Zone. Prohibited activities may include:

For rural districts:

- i. Clearing of vegetation, other than (i) maintenance by a federal, state of municipal agency, the Appalachian Trail Conservancy (ATC), or trail club (partnered with the ATC), and (ii) permissible timber harvesting as authorized in subsection b.ii above.
- ii. Storage of hazardous/noxious materials
- iii.Construction of parking lots, except for federal, state, or municipally-owned lots
- iv. Installation of above-ground utilities
- v. Construction of any industrial or commercial structures
- vi. Other activities as defined by individual municipalities

For borough or village locations:

- i. Storage of hazardous/noxious materials
- ii. Installation of above-ground utilities
- iii.Construction of parking lots, except for federal, state, or municipally-owned lots
- iv. Other activities as defined by individual municipalities

Section 5. Development Standards for the Primary and Secondary Conservation Zones. Any use or development of a lot within either the Primary or the Secondary Conservation Zone shall comply with the following development standards:

Note: Municipalities with satisfactory standards for activities such as timber harvesting, agricultural activities, protection of environmentally sensitive areas, landscaping, and viewsheds may not need additional standards in this section.

a. Rural Districts Site Design Standards.

- i. For any structure other then federal, state, or municipal structures constructed within the Secondary Conservation Zone, the minimum setbacks from the edge of the Primary Conservation Zone shall vary by the size of the footprint of the structure, as follows:
 - a. A structure 750 square feet or less shall have a minimum setback of 50 feet
 - b. A structure more than 750 square feet and less than 1,500 square feet shall have a minimum setback of 75 feet
 - c. iii. A structure 1,500 square feet or greater shall have a minimum setback of 100 feet
- ii. Buildings shall be screened with landscaping (native species are preferred) and located on the site in such a way that best preserves viewsheds from the Appalachian Trail

Note: Based on local ordinances and context, potential standards include:

- iii. Any building should be sited in the least visually prominent location of a site:
- iv. Any building shall not be located at the top of a ridgeline or silhouetted against the sky
- v. The scale of any new building should be compatible with existing, adjacent structures
- vi. Buildings shall preserve
 existing trees 6" caliper
 DBH (Diameter Breast
 Height) to the extent
 possible
- vii. Steep Slope Requirements
 - a. No regrading is permitted on slopes over 15%
 - b. No clear cutting of vegetation on slopes over 15%

b. Borough or Village Location Site Design Standards.

Steep Slope Requirements

Steep slopes provide significant groundwater recharge areas and benefits to local water supplies, in addition to natural beauty and vistas. These areas are generally wooded and not suitable for agricultural uses such as pastures or cropland. Wooded steep slopes areas can also be attractive for low-density residential development. The Lehigh Valley Planning Commission's Model Steep Slope Regulations are an excellent source to assist municipalities in regulating development in these areas and protecting regional water supply, natural habitat, and natural beauty. The model regulations limit the type of activities that can occur at varying degrees of steep slope terrain (e.g., 15-25% slopes).

See the Model Steep Slope Ordinance developed by the Lehigh Valley Planning Commission: Model Steep Slope Ordinance

i. Buildings shall be located on the site in such a way that best preserves viewsheds from the Appalachian Trail and is consistent with Traditional Neighborhood Development (TND) practices

Note: Based on local ordinances and context, potential standards include:

- ii. Building Placement: Buildings should be sited close to streets with their primary entrance facing the street
- iii. Building Articulation: Building materials, dimension, and architectural variety should promote an attractive and comfortable pedestrian walking environment
- iv. Parking: Limited parking should be located between the curb and the front of any building. All parking areas should be visible from the street should be screened
- v. Service Areas: all loading docks, trash dumpsters/enclosures, and utility equipment should be prohibited along the front facades of buildings and screened from view at the side or rear of buildings

c. Light and Noise Requirements.

- i. No direct or indirect glare illumination is permitted to spillover from to another property or to measure more than 0.1 footcandles (fc) along a property line
- ii. Any parking lot light fixtures must direct light downward at a 45-degree angle and not project at an angle or up toward the sky
- iii. Limit sound levels to 55 dBA for daytime and 50 dBA for Sundays, holidays and night hours

Section 6. Submissions and Review Process. The following procedures shall apply in any case of a proposed use or development of a lot located entirely or partially within a Primary Conservation Zone and/or the Secondary Conservation Zone.

Note: Municipalities with existing standards for submission and review of development applications may not need additional standards in this section. The following example is an excerpt taken directly from the Eldred Township, Monroe County Zoning Ordinance (See §1202.3 for full text) and can be tailored or may not be necessary based on a municipality's local ordinances.

a. Applications. Any request for a decision, interpretation or variance by the Zoning Hearing Board, application for a conditional use, or for a permit under this Ordinance shall be made in writing on a form provided by the Township and in accord with the procedures established by the Township. Such completed application, with any required fees, and with any required site plans or other required information, shall be submitted to the Township employee responsible for processing such application. The applicant is responsible to ensure that a responsible Township official notes the date of the official receipt on the application.

- **b. Number of Copies.** Unless waived by the Zoning Officer, five (5) copies of a site plan shall be submitted if an application requires action by the Zoning Hearing Board or Board of Supervisors, and two (2) copies shall be submitted if action by the Zoning Hearing Board or Board of Supervisors is not required.
- **c. Information Required.** The following information shall be submitted with any application hereunder.

Note: Basic information required includes names, address, location map, adjacent property owners, proposed and existing street and lot layout.

When a "Plot Plan" is required by the Zoning Officer, Planning Commission, Board of Supervisors, etc., the following information is needed:

- i. Existing and proposed man-made and/or natural features: (1) Water courses, lakes and wetlands (with names); (2) Rock outcrops, ledges and stone fields; (3) Buildings, structures, signs and setbacks required by the Zoning Ordinance; (4) Approximate location of tree masses; (5) Utility lines, wells and sewage system(s); (6) Entrances, exits, access roads and parking areas including the number of spaces; (7) Drainage and storm water management facilities; (8) Plans for any required buffer plantings; (9) Any and all other significant features.
- ii. Appalachian Trail Alignment, Protected Corridor, Distance from the Appalachian Trail.

Note: As noted in Section 2 above, a municipality should include language requiring that applicants accurately show the alignment of the Appalachian Trail and existing protected lands, at a level of accuracy acceptable to the municipality. An aerial photograph with GIS file showing the Trail alignment is recommended and available online from the Appalachian Trail Communities Network website.

Definitions

Act 24: An amendment to the 1978 Pennsylvania Appalachian Trail Act, authorizing the PA Department of Environmental Conservation and National Resources to acquire an interest in lands, as may be necessary, to establish, protect, and maintain the Appalachian Trail.

Appalachian National Scenic Trail (or Appalachian Trail): a 2,178.3 mile long trail extending from Maine to Georgia owned by the National Parks Service. The Appalachian Trail is maintained by the Appalachian Trail Conservancy and volunteer trail management groups.

Appalachian Trail Conservancy: a volunteer-based organization dedicated to the preservation and management of the natural, scenic, historic, and cultural resources associated with the Appalachian National Scenic Trail. http://www.appalachiantrail.org

Overlay District: a set of development standards and regulations applied to a delineated area over the area's underlying zoning district regulations. Overlay districts are used for many purposes. Examples include conservation of sensitive environmental features (e.g., waterways) or to encourage mixed-use development (e.g., downtown overlay district).

Protected Corridor: permanently protected federal, state, or municipal land surrounding the Appalachian Trail. Pennsylvania's 229-mile segment of the Appalachian National Scenic Trail is within a protected corridor of varying dimensions that includes National Park Service (NPS) land and state public land (e.g., gamelands). The *Appalachian Trail Communities Network website includes GIS data showing the boundaries of the Protected Corridor*, http://www.apptrailpa.org/

Sources used in developing this Model Overlay include: Appalachian Trail Overlay District - Eldred Township, Monroe County; Montgomery County, PA Riparian Corridor Model Ordinance; Farmington River Overlay Protection Districts in Connecticut; New River Parkway Regulations in West Virginia; and Hillside and Ridgetop Regulations, Asheville, NC Planning Department.