

Inter-Municipal Cooperation Alternatives

Report 4

Inter-Municipal Greenway Planning



Delaware Valley Regional Planning Commission



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Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency which provides continuing, comprehensive and coordinated planning for the orderly growth and development of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties as well as the City of Philadelphia in Pennsylvania and Burlington, Camden, Gloucester, and Mercer counties in New Jersey. The Commission is an advisory agency which divides its planning and service functions between the Office of the Executive Director, the Office of Public Affairs, and three line Divisions: Transportation Planning, Regional Planning, and Administration. DVRPC's mission is to emphasize technical assistance and services and to conduct high priority studies for member state and local governments, while determining and meeting the needs of the private sector.



The DVRPC logo is adapted from the official seal of the Commission and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the diagonal bar signifies the Delaware River flowing through it. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey. The logo combines these elements to depict the areas served by DVRPC.

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

Publication Abstract

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Geographic Area Covered: Nine-county Delaware Valley region, including Bucks, Chester, Delaware, Montgomery and Philadelphia counties in Pennsylvania and Burlington, Camden, Gloucester and Mercer counties in New Jersey.

Key Words: inter-municipal cooperation, greenway planning, trails, open space preservation, official map, conservation easements, transfer of development rights, inter-municipal committee, greenway authority

ABSTRACT

As part of a continuing project to foster inter-municipal cooperation, the Delaware Valley Regional Planning Commission is preparing a series of short "how-to" guides for elected and appointed municipal officials. The purpose of these guides is to outline how local governments can launch specific cooperative ventures with their neighbors in adjoining municipalities in order to increase services, reduce costs and improve the quality of life for their residents. This is the fourth guide in the series and describes the potential benefits of working with neighboring communities to develop an inter-municipal greenway, with or without a trail network.



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Inter-Municipal Greenway Planning

Prepared by the Delaware Valley Regional Planning Commission

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Introduction

There are 353 separate municipalities in the nine-county Delaware Valley region, each exerting local control and making independent decisions regarding land use in their community. Their desire for localized land use control may at times conflict, however, with other important goals, including providing local services and enhancing the quality of life for the community's residents while simultaneously reducing local taxes. Many elected and appointed officials now recognize that one way of more effectively addressing common issues is to work cooperatively with their neighboring municipalities.

As part of a continuing project to foster inter-municipal cooperation, the Delaware Valley Regional Planning Commission (DVRPC) is preparing a series of short "how-to" guides for elected and appointed officials. The purpose of these guides is to demonstrate how local officials can launch specific cooperative ventures with their neighbors to improve services and/or reduce costs. The first and second of these guides, released in July 1997 and June 1998, described how to create a regional recreation commission and how to plan for highway and transit corridors. The third, released in September 1999, considered the potential cost savings and increased efficiencies of inter-municipal police and emergency services. This fourth report describes the potential benefits of working with neighboring communities to create an inter-municipal greenway.

What is a Greenway?

A greenway is a corridor of protected open space managed for conservation and/or recreation. Greenways typically follow either natural land or water features (such as ridges or stream corridors) or man-made features (including abandoned rail corridors or canals). These "ribbons" of open space link natural, cultural and historic resources, and can enhance communication and cooperation between the communities they connect.

Some greenways are created solely for conservation purposes, focusing on the protection of stream corridors, plant-life and wildlife habitats. Others link existing parks and cultural resources and provide recreational opportunities such as biking, walking or canoeing. Some may preserve scenic corridors or vistas, and still others may be specifically designed to provide a tree-lined, naturally landscaped pedestrian route between points of interest in the community. Most greenways address more than one goal, and no two are exactly alike.

Because of their linear nature, greenways often pass through a number of municipalities. The creation of a multi-municipal greenway (with or without a trail network) can provide economic and ecological benefits and enhance the quality of life for residents in communities throughout the region, regardless of their size or density.

Regional Open Space Plans

This "how-to" guide is intended to assist local officials interested in preserving and linking open spaces within their own and neighboring communities. The designation and preservation of greenways throughout the Delaware Valley serves to implement the Open Space Element of DVRPC's long-range plan (DIRECTION 2020). The open space element of the current plan identifies areas throughout the region, including many environmentally sensitive stream corridors,



that should be preserved as open space, to provide both natural resource protection and recreational opportunities.

While the nine-county DVRPC region includes over 1.5 million acres of open space, only about 275,000 acres are currently protected as public parks. The Year 2020 Proposed Open Space Network identifies areas sufficient to meet the region's recreational needs through the year 2020 and beyond (see Map 1). It also designates for protection woodlands and upland habitat areas that provide an environment for plants and wildlife as well as river and stream corridors and wetlands that supply clean drinking water and a habitat for fish, plants and other wildlife. DVRPC is currently in the process of updating the proposed open space network as part of its *Horizons 2025* long-range planning initiative.

Benefits of Greenways

Greenways provide a number of environmental, recreational, cultural and economic benefits.

Environmental benefits of greenways include promoting species diversity; preserving rare, threatened or endangered species; providing natural flood control; filtering contaminants in surface run-off before they reach the stream; and improving air quality. Additionally, greenways help to preserve critical habitats. More importantly, carefully selected greenways can provide the necessary linkages between larger, prime habitat areas, allowing many wildlife species to range between these otherwise isolated spaces for food, shelter and mates.

Greenways can also provide **cultural benefits**, improving the quality of life for a community's residents. A greenway can enhance and protect scenic views, provide health and physical fitness benefits for trail walkers and bicyclists, and create a source of community identity and pride. They support a wide range of recreational activities (especially if they include access to a waterfront), including biking, jogging, bird-watching, walking, canoeing and fishing. Greenways also offer an outdoor classroom for educational and research activities and provide an opportunity to preserve historic sites and nostalgic places.

Additionally, linear greenways provide **linkages** between existing small municipal parks and other public spaces. The effectiveness and value of these individual woodlands, parks and open spaces is heightened when viewed as part of a greater system. If a pedestrian or bicycle trail is incorporated as a part of the greenway, they can also provide linkages and alternative transportation routes between homes, community facilities, transit stations and places to shop.

In addition to these ecological and cultural benefits, the creation of a greenway can provide **economic benefits** for their host communities. Studies have documented that many communities that have created greenways have directly and/or indirectly realized significant financial gains. Greenway and trail users spend money on a number of tourist-related activities, including lodging, restaurant meals and recreational activities. Additionally, business owners can profit from increased spending on both durable goods (such as bikes and skates) and soft goods (such as gasoline, soft drinks and food).

A 1992 National Park Service study found that people using a short, urban trail in northern California spent an average of \$3.97 per person per use, mainly on auto and restaurant-related expenses.¹ That study demonstrated that short "neighborhood" trails generated a smaller per person expenditure than did longer, more rural trails but were used more often, resulting in a larger overall economic impact. Expenditures by greenway users will in large part be determined by how far they travel to use it and how long they stay. In turn, the distance users will travel is affected by whether or not the greenway includes a trail, the length of the trail, and what kind of recreational activities are supported by it.

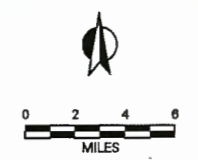
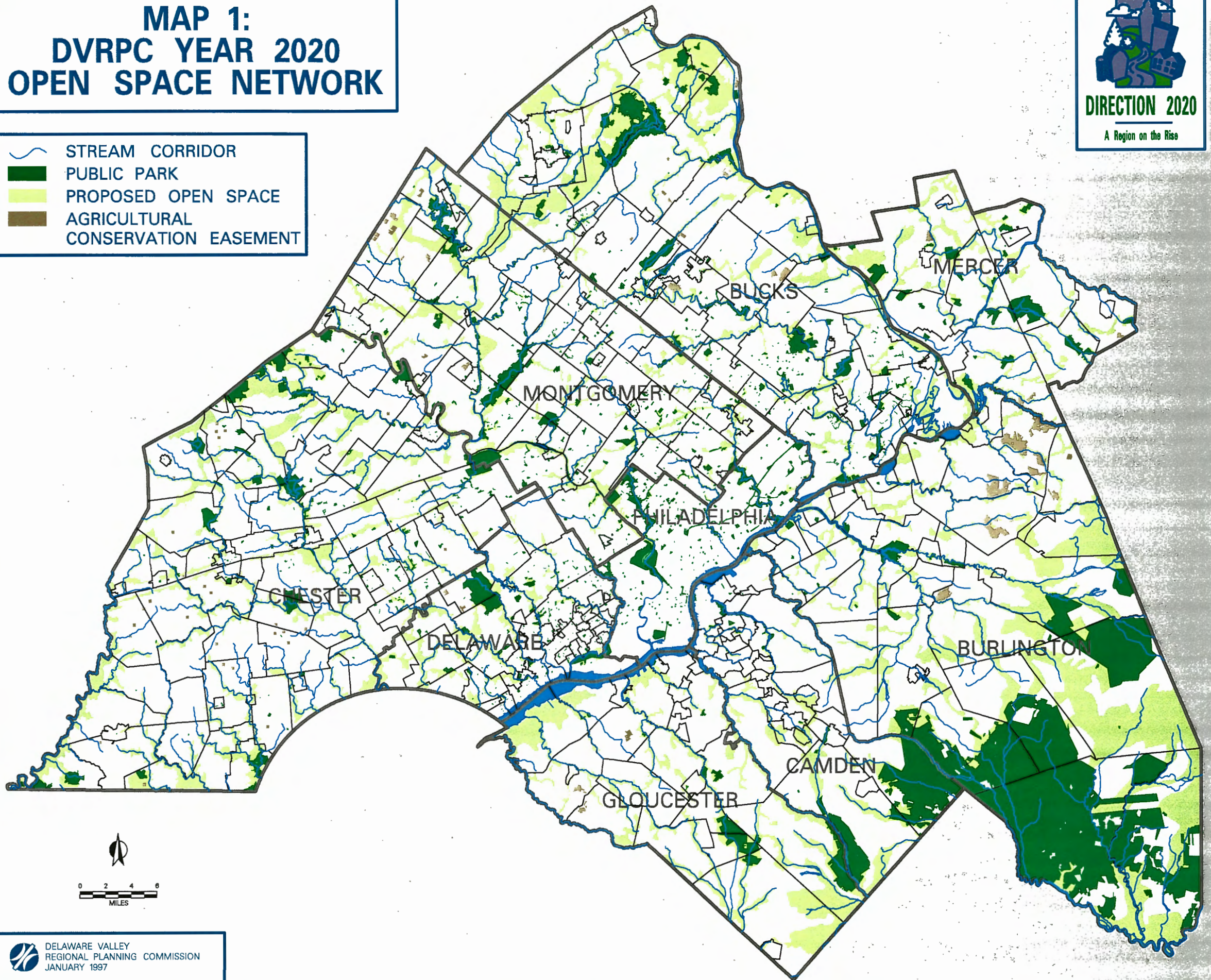
Creating a greenway within a community can also indirectly reduce costs to local government (and thereby increase available revenue). Preserving open space reduces spending on infrastructure by channeling development into smaller, denser areas. If a greenway is developed as a part of an overall growth management plan, there may also

¹Florida, Department of Environmental Protection, *Thinking Green*, page 5.

MAP 1: DVRPC YEAR 2020 OPEN SPACE NETWORK



- STREAM CORRIDOR
- PUBLIC PARK
- PROPOSED OPEN SPACE
- AGRICULTURAL CONSERVATION EASEMENT



be a consequent decrease in population growth, reducing demand for local services such as schools, water and sewer, fire and police protection, and transportation facilities and services. While the initial capital outlay for preserving open space may seem high, this cost must be weighed against the potential cost of providing services should these same acres be developed, particularly as residential units.

The creation of greenways and trails also results in increased sales and property tax revenues for local governments. The Association of New Jersey Environmental Commissions (ANJEC) has estimated that open space increases the value of adjacent property by 15 to 30 percent.² Other studies have also documented that property values usually increase in areas adjacent to a greenway, including a 1995 study of three greenways in the metropolitan Denver area, a 1994 study of two Minnesota rail-trails and a 1992 study by the National Park Service. These increased property values translate into increased property tax revenues. Greenways can also lead to increased activity at a wide range of commercial properties (from local restaurants to gas stations to print shops that publish marketing materials), which in turn helps to keep those businesses (a.k.a. tax ratables) both viable and stable.

Greenways can provide natural and less expensive solutions to pollution control and mitigation for problems such as erosion and flooding. Additionally, some communities with greenways have collected fees from commercial users that pay to utilize the greenway in ways that will not interfere with the fundamental purpose of the trail, such as rights-of-way for cables, pipelines or transmission lines. In Montgomery County, Maryland, for example, the local power company contributed funding for the development of a trail in exchange for placing power lines near the trail. In Northern Virginia, the Regional Park Authority collects \$450,000 per year from fiber-optic license fees along a 45-mile multi-use trail, and also collects \$25.00 per year from adjacent property owners along the trail who use garden plots located in the trail's right-of-way.



Costs of Greenways

While greenways provide numerous ecological, cultural and economic benefits, their creation is not without cost. The most direct **economic costs** of a greenway are development and operation costs, including initial planning studies, leasing or acquisition costs, construction and labor costs, operation and maintenance costs, and marketing costs. These costs can vary from a few thousand dollars to hundreds of thousands of dollars, depending on factors such as how much property is identified for preservation or conservation, the current uses and ownership of the properties and what improvements and facilities are desired.

Potential indirect economic costs of greenways include a short-term reduction in property tax revenues, if sites chosen for public use or protection were originally subject to property taxes and will be removed from the tax rolls after the greenway is in place. If the properties might have otherwise been developed as offices or other commercial uses, the community may also suffer some opportunity costs, defined as the loss of revenue from specific sites that might have been associated with the property if it was developed. These indirect costs, however, are often more than outweighed by an eventual increase in tax revenue from adjacent properties and the potential savings on local expenditures for infrastructure and services throughout the entire greenway.

The potential **human costs** of creating a greenway (especially one with a trail) include a perceived increase in crime and traffic congestion. Trail opponents argue that because of improved

²ANJEC, *Keeping Our Garden State Green*, page 51.



access and increased use of the area, both trail users and adjacent property owners become more susceptible to both nuisances (such as noise and litter) and crimes (including robbery, assault, vandalism, and trespassing).

Studies have documented, however, that

concerns about crime and vandalism are unfounded. A 1995 study of three neighborhood greenways with trails in the metropolitan Denver area, for example, reported that greenways had no impact on crime and did not increase trespassing on adjacent properties.³ A 1992 National Park Service study examined the incidence of crime along a trail that passes between the backyards of hundreds of single-family homes in an affluent suburb of San Francisco. This study reported that few adjacent or nearby property owners reported crime or nuisance problems.⁴

In the case of rails-to-trails, experience has shown that the conversion of an otherwise abandoned rail line to a public, multi-use trail usually decreases crime and vandalism, since there is more activity in the area and barriers are often erected to limit access for unauthorized vehicles. Within this region, with hundreds of miles of trails and greenways now in place, there is no evidence that these facilities have led to any negative consequences.

In terms of **ecological costs**, greenways with poorly designed trails can cause soil erosion and the fragmentation of natural habitats, since roads and trails that bisect natural ecosystems where trails did not previously exist can isolate some

areas. Trails may also allow the introduction of human impacts into the natural environment, such as litter, trampling of habitats, unnatural feeding of animals, disturbances in nesting activities and the displacement of wildlife.

Greenways provide natural corridors that facilitate the movement of wildlife and can sometimes attract unusually high numbers of certain creatures, especially if trail users feed certain species (Canadian geese, for example). They may therefore facilitate the spread of contagious diseases. Advocates argue, however, that greenways also provide an escape route for wildlife fleeing from predators or disease. In any case, these ecological costs can be minimized through environmentally sensitive designs and practices, and are usually more than outweighed by enhanced opportunities for environmental education and an increased appreciation for the natural environment facilitated through improved public access.

Trail, or No Trail?

Once a community decides to create a greenway, an important question that must be discussed and debated is whether or not the project will incorporate some kind of trail, and, if so, what kinds of uses (walking versus biking, for example) will be encouraged. As mentioned above, there are several advantages to incorporating a trail as a part of the local greenway. Many of the economic benefits associated with a greenway are directly related to trail use, since trails attract a larger number of users and encourage them to jog, skate, bike and spend money on food and activities. Increased pedestrian and bicycle activity on a developed trail versus an unimproved, rarely used trail may also reduce problems such as trespassing and vandalism. Developing and then maintaining a trail, however, obviously costs more than preserving passive open space.

Ecological benefits are approximately the same for a greenway with a trail as without, since in either case open space is protected and linkages between habitats are forged. Costs to the environment will inevitably be higher with a trail, since even well-designed trails cause at least some amount of erosion and disturbed habitats. These ecological costs are usually more than

³The Center for International Public Management, *Thinking Green*, page 13.

⁴Ibid.

outweighed, however, by human and cultural benefits, which are significantly higher when a greenway includes a trail that facilitates access and supports recreational and educational activities.

Successfully implementing and then maintaining a greenway depends on the support of both local officials and the general public, including adjacent property owners. The decision as to whether or not to incorporate a trail into a greenway plan is therefore one that must be reached by consensus during the planning and visioning process. This decision should take into consideration the primary purposes of creating the greenway as well as the current and future resources available for greenway maintenance and oversight.

The Planning Process

Planning for a greenway requires a commitment from a concerned group of individuals who are both willing and able to provide the leadership and organization that such an initiative will require. The initial effort can be spearheaded by municipal officials, a regional or county agency, a local environmental commission, a local non-profit group or a group of residents. The basic planning process involves identifying and organizing the stakeholders (which might include state, county and local officials, the business community, interested environmental groups, property owners and/or private citizens); defining broad goals; collecting the appropriate data and background information; creating maps and analyzing the data; soliciting additional input from the community; refining the project's goals and objectives; and producing a greenway plan, including strategies for its implementation and ongoing administration.

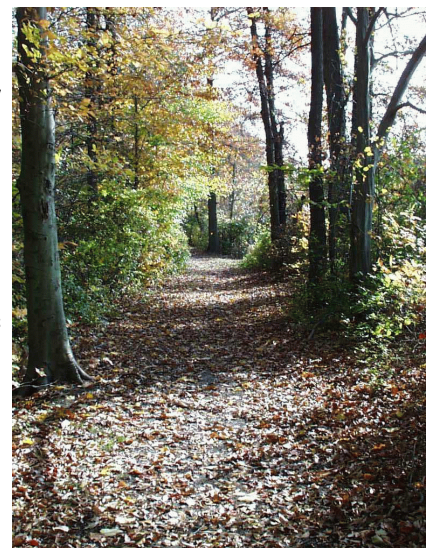
Existing available resources as well as potential grant opportunities (for both planning and acquisition of open space) should be identified early in the process. Appendix A identifies government and non-governmental agencies and organizations that can provide valuable technical assistance as well as financial assistance, and Appendix B includes a listing of potential funding opportunities that might be available to further greenway planning efforts. Many if not most require some percentage of local match, in either actual funds or in-kind services.

In any given community, the interests and goals of the various stakeholders will be both many and varied. Some may see groundwater protection or habitat preservation as key, for example, while others will be more concerned with recreational activities and trail development. Others may support the creation of a greenway as a catalyst for economic development and revitalization of the corridor. Some may favor incorporating a formal trail that will attract users from outside the immediate area to the greenway, while others may be absolutely opposed to a trail. These individual priorities and preferences must be weighed and balanced, since any plan can only become a reality if it gains relatively widespread support.

Public Input

Gaining the support of the local community, as well as public and private agencies and organizations that can help to implement the plan, is critical to the success of the greenway planning effort. Public input from residents and coordination with municipal, county and state agencies as well as local non-profit organizations are therefore important components of the planning process. Initial efforts to involve the public should focus on raising the residents' awareness of greenway and water quality issues and describing what a greenway can do for the community. The group's goals and objectives should then be identified, which might initially be very general, focusing on broad environmental and recreational objectives. As supporting information is collected and interest in the greenway grows, these goals will probably become much clearer and more focused.

A steering committee consisting of representatives of federal, state, county, and municipal agencies as well as local





non-profits and residents should be formed, and several meetings should be held to discuss specific issues as they arise. Larger, open forums to solicit additional public input should also be held periodically throughout the process.

Encouraging an open dialogue will help to keep residents and other interested parties informed as to the plan's progress and ensure that the final plan represents a consensus of the group.

Collecting and Analyzing the Data

Once the group has defined a vision, background information must be collected. Data collection should include an inventory of environmental, recreational and cultural features as well as the identification of potential linkages between cultural and recreational resources and open spaces. Figure I describes some of the background data that should be collected and considered when developing a greenway plan.

Most of this information (along with valuable technical assistance) is available at little or no cost from federal, state, regional, county and local public agencies, and will need only to be collected and organized. Many of the agencies and groups identified in Appendix A can provide information. A base map of the area should be created, as well as a series of overlay maps depicting land use, ownership, natural features, historic resources, types of open space, composite zoning and areas proposed for conservation and trails. DVRPC can provide much of this data for use in Geographic Information System (GIS) mapping and analysis and also maintains an Internet-based interactive mapping application (see www.dvrpc.org).

Maps are especially useful for reviewing and coordinating information, identifying potential linkages between existing open spaces and historic resources, and effectively presenting the information to the community and potential funding sources. A greenway plan that balances the needs and priorities of the entire community can then be developed, based on identified goals and objectives, analysis of the data and public input.

From Plan to Reality

A critical issue that must be considered is how the greenway plan will be implemented. Some objectives of the plan may be met by existing federal and state environmental regulations that limit development and prohibit certain activities within defined areas (such as wetlands). Additional actions that can be undertaken by each municipality to implement a greenway plan include revising local zoning ordinances, acquiring public open spaces and constructing specific improvements along a trail. In the case of a greenway that spans several communities, municipalities need to decide who will be responsible for each component and coordinate their individual and collective efforts.

One planning tool that might be employed to accomplish the objectives of a greenway plan is the adoption of an **official greenway map** by each municipality along the greenway. An official greenway map is a map designating existing and proposed areas for open space preservation that is accompanied by an ordinance formally adopted by the municipality. By identifying these areas on an official map, the municipality announces its intentions to preserve these areas for flood control, streambank stabilization, the provision of wildlife habitat and/or recreation. Once adopted, the map gives notice to property owners and prospective developers of the municipality's intentions, but does not in and of itself serve to acquire the land. If a development or subdivision is proposed for a property designated as open space, the municipality has the option for up to one year after final plan approval to negotiate ways to preserve the land.

Official maps are authorized in both Pennsylvania (within the Municipalities Planning Code) and New Jersey (in the Municipal Land Use Law).

Washington Township (in Gloucester County, New Jersey) adopted an Official Greenway Map that facilitated the dedication of several hundred acres of streamside land throughout the municipality.

Municipalities can also create special **overlay zoning districts** that impose extra provisions above and beyond the traditional zoning code within the defined district. These additional provisions might include cluster zoning (where all of the allowable development is concentrated in specific sections of a property, leaving other areas as open space); lowering densities; enforcing stricter stormwater run-off or erosion control standards; restricting the removal of trees and vegetation; providing density bonuses for developers who provide public access; or enforcing height restrictions to protect views.

Stream corridor protection overlays, for example, are specifically intended to ensure that vegetated riparian buffers are maintained. These overlays typically limit the intensity of land uses within the district and require that development be set back from sensitive floodplain and wetland areas. Model stream corridor protection ordinances and the names of municipalities that have adopted them are available from the Association of New Jersey Environmental Commissions. The Montgomery County Planning Commission in Norristown, Pennsylvania has also produced a model riparian corridor ordinance.

Zoning restrictions and environmental regulations can protect certain areas by limiting development. These regulations may change over time, however, and may not always be adequately enforced. Most greenway plans therefore identify certain properties that should either be publicly acquired for open space preservation or conserved through deed restriction (left in private use but with limitations on its future development).

One obvious means of preserving open space is **public acquisition** through fee simple purchase of properties that should be preserved. Another less costly alternative is the acquisition of **conservation easements** that impose certain restrictions or grant certain rights on the use of private property. Easements may either be purchased from the private property owner or donated by the owner to an agency willing to hold

them. Notice of the easement is then filed with the deed. A conservation easement can substantially reduce the value of the property for both real estate and inheritance tax purposes.

Easements for greenways typically prohibit building, industrial or commercial activity, removing or disturbing trees and vegetation, and dumping or excavation. Easements are granted to a specific entity, such as a land trust or

Figure I
Data to Consider in Planning for a Greenway

Natural Resources	Cultural/Recreational Resources
Soils	
Topography	Historic landmarks
Steep slopes	Historic districts
Wetlands	Archeological sites
Unique geological features	Abandoned railroad rights-of-way
Aquifer recharge areas	Utility rights-of-way
Floodplains	Trails and bike paths
Surface waters	Local points of interest (arenas, museums, etc.)
Endangered species habitats	Local scenic vistas

Land Use and Open Spaces

- Types of developed land uses
- Active farms, designated agricultural districts and permanently preserved farms
- Public parks, private reserves and camps
- Schools and other public facilities
- Playing fields
- Private recreation areas
- Cemeteries
- Sewage treatment plants
- Landfills

Miscellaneous

- Existing land use plans
- Zoning regulations
- Property ownership

Source: Adapted from ANJEC's *Keeping Our Garden State Green*, page 18.



municipality, with the understanding that the conservation area will be periodically inspected for compliance. Municipalities that accept easements therefore need to allocate the necessary resources to enforce the agreement in the future.

Other options available for acquiring or otherwise conserving land include **donation** (where the property is transferred to the community for free, and the value of the land becomes a tax deduction for the owner); **installment sales** (which reduce initial capital outlay from the municipality and capital gains taxes for the owner); **reserved life estates or remainder interest** (where land is transferred to a land trust immediately but the owner reserves the right to use it for the rest of his or her lifetime, thereby reducing inheritance taxes for any heirs) or through a **bequest**, whereby a land owner conveys the deed for the property to a land trust when they die.⁵

Another land preservation tool that can be used by municipalities interested in open space preservation is the **transfer of development rights** (TDR). TDR is a strategy which involves the sale of development rights from one parcel (which is then preserved as open space or farmland) to another (where development is concentrated). The sale of development rights is similar to placing an easement on the property, in that the land remains in private ownership but has restrictions regarding its potential use. TDR is authorized for all municipalities in Pennsylvania and has been utilized very effectively in Burlington County, New Jersey.

⁵See DVRPC, *Closing the Missing Link on the Assunpink Creek Greenway*, page 44.

In practice, a TDR program is actually a larger scale version of cluster zoning, since both serve to limit development in one area and concentrate development in others. Unlike cluster zoning (which affects the location of development on one single property), however, a TDR program results in development restrictions in one area and higher density development on another, usually noncontiguous tract.

Greenway Administration and Oversight

Consideration must also be given as to how the greenway plan will be administered and, in the longer term, who will be responsible for its maintenance and oversight. The simplest option available to municipalities is to implement pieces of the plan within their own communities, at their own initiative and based on their own individual priorities. For some parts of a greenway plan, such as the acquisition of certain public open space or the construction and maintenance of certain site-specific improvements, **individual municipal actions** may be appropriate. Each municipality would then be responsible for maintaining its own open space and facilities within the greenway.

The greatest advantage to this option is its simplicity, since no coordination or cooperation is required. Its disadvantage is that these individual actions may be uncoordinated and disjointed and often fail to make the most efficient use of limited available resources. Funding agencies are often more likely to favor inter-municipal efforts which address issues that cross jurisdictional boundaries. Additionally, local officials and individual members of Boards and Commissions change periodically, and local initiative and momentum may be lost in the transition.

An alternative is the formation of an **inter-municipal coordinating committee** to oversee the implementation of the greenway plan, made up of representatives from each municipality as well as appropriate federal, state and county agencies and other interested stakeholders. The formation of a coordinating committee ensures that the needs and priorities of the different municipalities are weighed and balanced, and that each community shares equally in the greenway's potential costs and benefits.

An inter-municipal committee is particularly effective for addressing issues that cross jurisdictional boundaries, such as non-point source pollution control and educational outreach, and could be helpful in producing model ordinances and advising state and federal officials on actions that take place within a multi-municipal watershed. The committee could also coordinate grant proposals to potential funding sources and ensure that municipalities within the greenway coordinate their efforts rather than compete against one another for limited funding.

An inter-municipal committee could hold regular meetings, hosted and chaired by members on a rotating basis, or could meet only as needed (based on funding cycles, for example). Administrative assistance (for organizing meetings, preparing mailings and the preparation of grant proposals and annual reports, for example) could be sought from an existing agency, such as the county planning or recreation commission. Municipalities should be expected to contribute towards any funding needed by the committee, either through a flat rate or through some formula based on population, land area within the greenway or total land assessment.

A **greenway “authority”** may also be formed as another type of inter-municipal entity. Authorities are generally charged with a specific mission (which might include, for example, long-range greenway planning). More commonly formed to manage sewer and water infrastructure systems, the Pennsylvania Municipal Authorities Act also authorizes their formation for either flood control or parks and recreation. A greenway authority would operate in much the same way as an Inter-municipal committee, but could also own property and hold conservation easements.

Yet another alternative is utilizing the services of a private, non-profit organization (such as a **land conservancy, land trust or watershed association**) to implement portions of an adopted greenway plan and manage the greenway. One benefit of using a land conservancy or private land trust (such as the Brandywine Conservancy or the Natural Lands Trust) is that these organizations are considered types of public charities and are allowed to accept tax-deductible donations of land.

Unlike land trusts, watershed associations usually have a sharper geographic focus (the Chester-Ridley-Crum Watershed Association in Delaware County, Pennsylvania, for example, or the Mantua Creek Watershed Association in Gloucester County, New Jersey) and often concentrate on issues and activities directly related to the watershed, such as water quality monitoring and riparian restoration projects. If allowed in their by-laws, some watershed associations may also take on the role of land trusts, allowing them to receive and manage properties preserved as open space as well as conservation easements.

Case studies

This section briefly describes examples of existing greenway and trail planning initiatives in the Delaware Valley, including two in New Jersey (the Upper Mantua Creek in Gloucester County and the Assunpink in Mercer County) and two in Pennsylvania (the Schuylkill River Trail, which traverses Chester and Montgomery Counties as well as the City of Philadelphia within this region; and the Chester Valley Trail, which will eventually span parts of Chester and Montgomery Counties). It also includes a discussion of the Ridley Creek Conservation Plan, an ambitious watershed planning effort in Delaware County, which includes greenway planning initiatives.

The Upper Mantua Creek Greenway Plan

The Upper Mantua Creek Greenway Project was developed as a partnership between DVRPC, the Gloucester County Planning Department and the Gloucester County Federation of Watersheds. DVRPC conducted the technical mapping and planning work for the project with the support of the County Planning Department, while the Federation of Watersheds assisted with public outreach and education.

The greenway plan developed for the Mantua Creek extends from the creek’s headwaters in Glassboro to the dam at Bethel Mill Park and along Duffield Run, one of its tributaries in Washington Township. The planned greenway is located in a suburbanizing area of Gloucester County, and includes parts of Mantua and Washington Townships and the Boroughs of



Pitman and Glassboro. The area is anchored by major state, county and municipal parks and bordered by numerous farms. Recreational swimming and fishing are popular in the area, and water quality is good but is threatened by poor stormwater management. The group's goals include the following:

- the preservation of a natural vegetative buffer along the creek;
- more effective watershed-wide stormwater management;
- involving and educating the public as to water quality issues, the importance of stream buffers and good land stewardship;
- improving public access and expanding recreational and educational opportunities along the Mantua Creek; and,
- the protection of farmland, historic resources, lakes and scenic areas.

Map 2 illustrates existing parks and open spaces in the study area as well as a proposed rail-to-trail linking Scotland Run Park to the Glassboro Fish and Wildlife Management Area that would connect with a proposed trail along an existing sewer line easement paralleling the Creek. Major recommendations of the greenway plan included strengthening municipal plans and ordinances; the formation of a Mantua Creek Watershed Association; the protection of stream-side open space using dedicated county open space tax revenues; the development of trail linkages between existing parks and open spaces; and the formation of a lake association to address issues related to a number of "high hazard" dams.

Of these recommendations, two have been implemented to date. The Mantua Creek Watershed Association was formed at the end of the study process and is now active with many projects in the area, and county open space revenues have been used to preserve farms located along Duffield's Run. Local municipal officials were generally reluctant, however, to revise local ordinances, even after having already lost opportunities to preserve open space and expand recreational opportunities for their residents. Additionally, local resistance to trails (based largely on misconceptions about potential crime and vandalism) and the lack of any local initiative has stymied the development of proposed trail linkages in the area. This problem illustrates the need for ongoing public education and outreach efforts within the planned greenway.

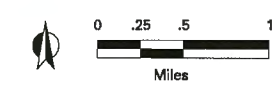
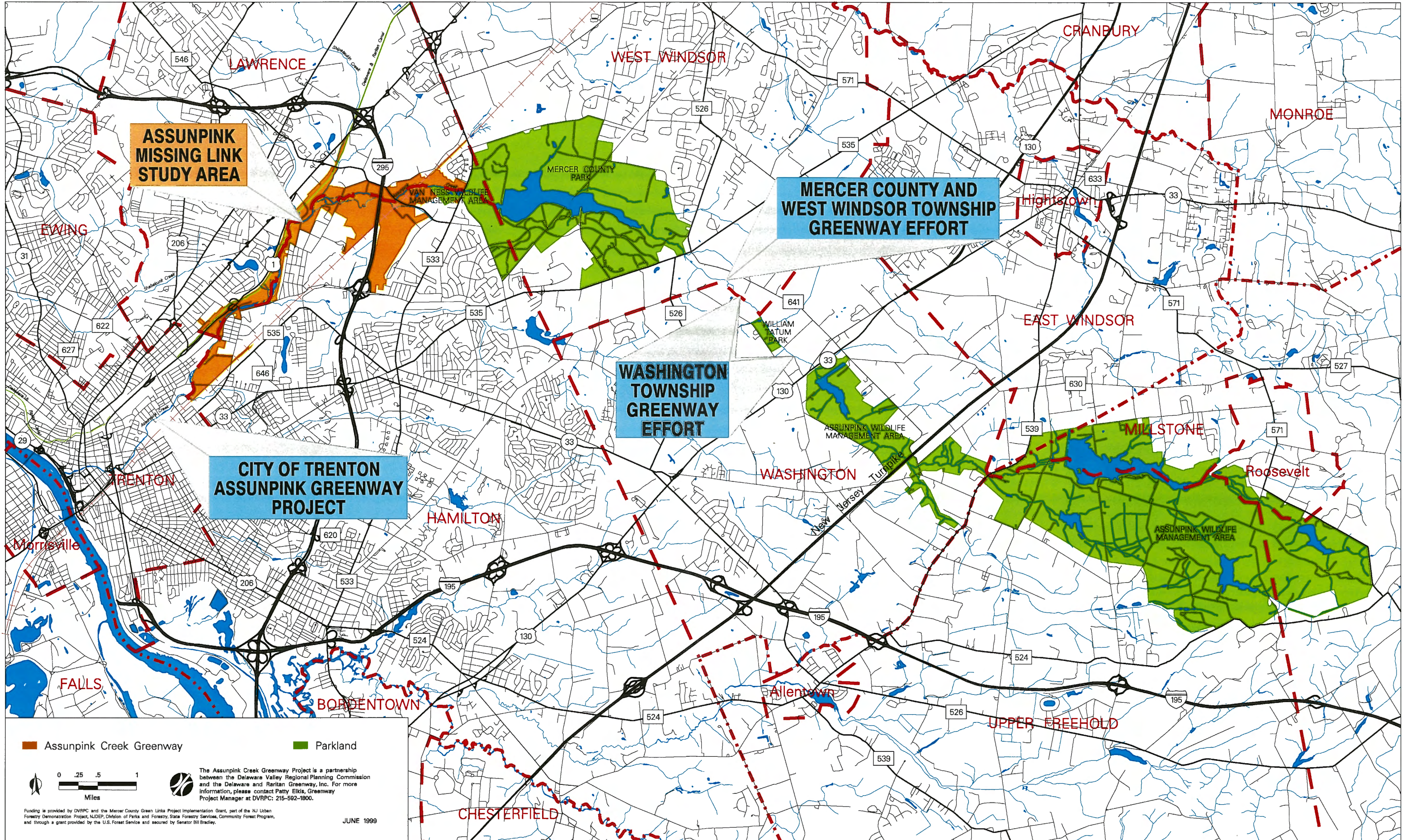
For additional information on the Upper Mantua Creek Greenway, contact DVRPC (215-592-1800) or the Gloucester County Planning Department (856-863-6661).

The Assunpink Creek Greenway

In January 2000 DVRPC released *Closing the Missing Link on the Assunpink Greenway*, a greenway plan for a section of the Assunpink Creek in Mercer County, New Jersey. The study area extends between the Mercer County Park and the City of Trenton, where the creek forms the boundary between Hamilton and Lawrence Townships. The area was chosen because it represents a missing section in what could be one continuous greenway system between the Creek's headwaters and its mouth. Map 3 illustrates the study area's location in relation to existing parkland and ongoing greenway planning efforts.

The Assunpink Greenway effort was a partnership between DVRPC and the Delaware and Raritan Greenway, Inc. (a land trust focusing on preservation efforts in central New Jersey). A steering committee was formed to guide the effort, comprised of representatives from Hamilton and Lawrence Townships; the Mercer County Planning Division; the Delaware and Raritan Canal Commission; the Assunpink Watershed Association; the New Jersey Green Acres Program; the New Jersey Office of Natural Lands

MAP 3: ASSUNPINK CREEK GREENWAY STUDY AREA



The Assunpink Creek Greenway Project is a partnership between the Delaware Valley Regional Planning Commission and the Delaware and Raritan Greenway, Inc. For more information, please contact Patty Elkins, Greenway Project Manager at DVRPC: 215-592-1900.

Funding is provided by DVRPC and the Mercer County Green Links Project Implementation Grant, part of the NJ Urban Forestry Demonstration Project, NJDEP, Division of Parks and Forestry, State Forestry Services, Community Forest Program, and through a grant provided by the U.S. Forest Service and secured by Senator Bill Bradley.

JUNE 1999

Management; municipal staff from the adjacent communities of Trenton and Washington Township; and area residents. Extensive data was collected and mapped during the course of the study, which was critical to the planning analysis and for depicting the study area at community meetings.

Public input was also an important component of the greenway planning effort. Presentations of the Plan were made to the Lawrence and Hamilton Township Planning Boards and the Lawrence Township Conservation Foundation. Several meetings were held with the steering committee, and two open public meetings were held: the first to present the study's initial findings and solicit feedback, and the second approximately one year later to present preliminary recommendations.

The goals and objectives of the greenway study were defined and refined based on a combination of mapping, research, analyses and input from steering committee members and the public. The study's primary goals included:

- conserving environmentally sensitive open space along the creek;
- strengthening land use regulations;
- protecting water quality;
- developing trail connections between existing parkland, the D & R Canal Towpath and other existing area trails;
- promoting good land stewardship; and,
- agreeing on what should be done with a breached dam within the study area.

The report recommended implementing a conservation package that would preserve a buffer of at least 300 feet along each side of the Creek. This package describes specific properties for which protection measures should be undertaken and suggests which agency or organization should take the lead in acquiring or preserving each parcel. Other recommendations included forming a task force to implement a restoration plan for the Whitehead Dam and Pond and developing a trail linking the D&R Canal Towpath with Mercer County Park and five other existing trails.

Since the completion of the study, a task force has been formed and has met to debate the future of



the dam and pond. Lawrence Township has passed an open space tax and developed a list of priority parcels, including some identified in the plan. Additionally, staff of the NJDEP Green Acres program is incorporating the Plan into their *Capitol to the Coast* greenway initiative.

For additional information on the Assunpink Greenway Plan, contact the Delaware Valley Regional Planning Commission (215-592-1800).

The Schuylkill River Trail

Planning for a greenway along Pennsylvania's Schuylkill River formally began in 1974, when the Schuylkill River Greenway Association was formed. The group's overall mission at the time was the creation of a greenway along the entire length of the river. In 1995, the Schuylkill River Heritage Corridor was designated by the Commonwealth as a State Heritage Corridor. More recently, the Schuylkill River Valley National Heritage Area Act was approved on October 6, 2000. This legislation will provide up to \$1 million per year in federal funds to communities located within the Schuylkill River watershed interested in conserving their natural, historic and cultural resources while pursuing economic opportunities.

Extending for 135 miles along the Schuylkill River, the Heritage Corridor traverses five counties, including Philadelphia, Montgomery and Chester counties. Dozens of miles of trails and greenway open space are currently available to the public along the Corridor. The benefits of the Corridor include the preservation of historic and cultural

resources; increased opportunities for environmental education and public outreach; a myriad of outdoor recreational activities; and enhanced economic opportunities.

The Schuylkill River Trail forms the backbone of the Heritage Corridor, currently extending from the Philadelphia Museum of Art to Valley Forge National Park. Built on the right-of-way of the old Pennsylvania Railroad, the Schuylkill River Trail has been recognized by the United States Department of the Interior as a National Recreation Trail. In the City of Philadelphia, the trail follows paths in Fairmount Park as well as the Manayunk Canal Tow Path. It connects to the Schuylkill River Park, a Center City riverside park currently being developed by the Schuylkill River Development Council which will extend the trail south from the Museum of Art.

In September 1999, the Montgomery County Planning Commission initiated a year-long effort to develop and implement a plan to create a connected system of open space along the County's portion of the Schuylkill River Valley, utilizing a grant from Pennsylvania's Department of Conservation and Natural Resources as well as County funding. This greenway planning effort, which involves 16 riverfront boroughs and townships, is intended to support and complement the County's long-range goals and objectives, including its existing trails plan.

The Schuylkill River Greenway Stewardship Study Advisory Committee, consisting of three members from each of the County's Open Space and Parks Boards and the Planning Commission, was formed to direct the study. Three subcommittees also met, focusing specifically on land preservation; greenway management and implementation; and public relations and marketing. Simone Jaffe Collins, a landscape architecture and environmental planning firm, was chosen by the Montgomery County Commissioners as the study's consultant. A municipal advisory committee, consisting of representatives from each of the 16 riverfront communities, was also formed to provide input and direction. Staff from the Montgomery County Planning Commission provided administrative, technical and mapping support, and the National Park Service provided

technical assistance through its Rivers, Trails and Conservation Assistance program.

During the course of the study, the advisory committee met monthly to review ongoing progress and coordinate the planning efforts. Individual interviews were conducted with representatives from each of the County's riverfront municipalities, to determine each community's needs, opportunities and constraints. Goals varied from community to community, with some municipalities, for example, hoping to increase public access to the river and others aiming to protect and preserve land. Numerous public meetings were scheduled, and several special events were organized to raise public awareness of the importance of preserving the greenway (including river floats, bike trail tours and clean-up efforts along the riverfronts).

A draft greenway stewardship plan was distributed by the consultants in June 2000 for review. The plan defines specific zones along the river and describes actions that can be undertaken within each zone to accomplish the Plan's objectives. These zones include the river itself; a riparian zone (directly along the riverbank, where preservation is a priority); a stewardship zone (adjacent to the riparian zone, where sustainable building practices are encouraged); and a community zone (which includes the entire land area of all of the riverfront communities).

An important component of the planning process has been an effort to gain municipal acceptance of the greenway plan's guiding principles and goals. To that end, a Schuylkill River Stewardship Compact was written and adopted by the County Commissioners in May 2000, and riverfront municipalities were asked to formally accept the compact and adopt a municipal resolution endorsing the greenway plan's principles. A revised plan was released to the municipalities in November 2000 for final review, and the final greenway plan is scheduled to be adopted by the County Commissioners by March 2001.

For additional information on the Schuylkill River Greenway, Trail or Heritage Corridor, contact the Montgomery County Planning Commission (610-278-3722; or www.montcopa.org/schuylkill).

The Chester Valley Trail

Another trail planning initiative currently underway in the DVRPC region is the Chester Valley Trail, which will eventually span parts of both Chester and Montgomery counties and provide a linkage to the Schuylkill River Trail. In 1998, Montgomery and Chester County entered into a joint agreement to merge federal grants while sharing local costs to develop the trail. The majority of the funding for the development of the trail to date has come from Intermodal Surface Transportation Efficiency Act (ISTEA) grants (with Chester County receiving over \$2 million and Montgomery County almost \$1 million to date).

In Montgomery County, plans call for the Chester Valley Trail to begin at the Chester County line near Valley Forge National Historic Park and link to the Schuylkill Valley Trail at Norristown. Parts of Montgomery County's section are currently under construction, and the project is scheduled to be fully completed within five to seven years. In Chester County, the Chester Valley Trail will eventually extend approximately 16 miles from the Montgomery County line to Downingtown, roughly following Route 202 and Route 30.

The benefits of developing the Chester Valley Trail include preserving valuable open space; linking existing recreational sites to residential and commercial areas; providing recreational and educational opportunities for residents; and establishing an alternate pedestrian and bicycle route between the Route 30 and Route 202 corridors. A 1.4 mile long section of the trail beginning at Ship Road in West Whiteland Township and ending at Phoenixville Pike in East Whiteland Township was completed and opened to the public in June 2000.

The RBA Group, the consultant responsible for designing the Chester County portion of the trail, has completed the site analysis for additional sections, and several public meetings were held in the Spring of 2000 to present their findings and solicit public input. The Chester County Parks and Recreation Department, the agency responsible for spearheading the planning effort in the County, expects all of the County's portion of the trail to be completed by the Spring of 2002.



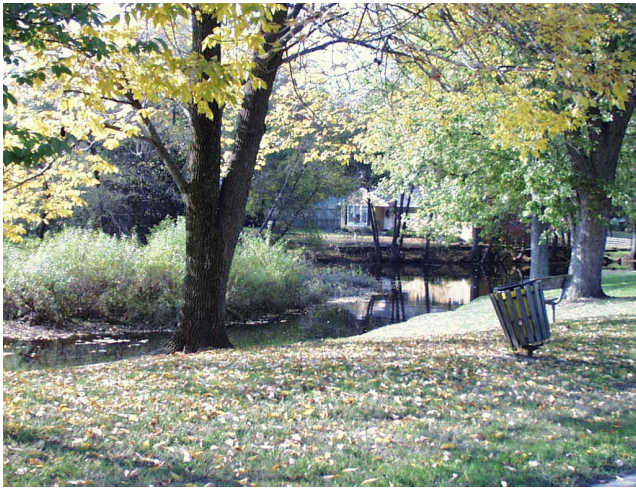
The trail will be paved along its entire length and built mainly on abandoned rail beds. Once completed, the Chester Valley Trail will provide linkages to several other trails, some of which currently exist and others that are envisioned throughout northeastern and central Chester County. These include the Struble Trail, which links Downingtown and Marsh Creek State Park.

For additional information on the Chester Valley Trail, please contact the Chester County Parks and Recreation Department at 610-344-6415 or the Montgomery County Planning Commission at 610-278-3722.

The Ridley Creek Conservation Plan

The Ridley Creek Conservation Plan is a watershed-based plan covering parts of both Chester and Delaware Counties. The Plan is included in this discussion because it includes greenway planning efforts and illustrates the potential for multiple communities and counties to work together to develop a common plan that will benefit all their residents. The geographic area covered by the Plan includes West Whiteland, East Whiteland, East Goshen, Westtown and Willistown Townships in Chester County; Edgemont, Upper Providence, Middletown, Nether Providence, Brookhaven and Ridley Townships in Delaware County; and the Boroughs of Eddystone, Media, Rose Valley and Parkside as well as the City of Chester, also in Delaware County.

In 1994, the Greenspace Alliance, a project of the Pennsylvania Environmental Council (PEC),



received matching funds from the National Park Service and the Delaware County Council for a study of the feasibility of instituting a greenway along the main stem of the Ridley Creek. The Greenspace Alliance then formed a partnership with the Chester-Ridley-Crum Watershed Association (founded in 1970) to undertake the project, and enlisted the Natural Lands Trust as a professional consultant.

The Delaware Valley Regional Planning Commission also assisted in the effort by producing a series of corridor maps depicting land use, ownership, zoning and natural resource areas. An application for funding was submitted early in the process to the Pennsylvania Department of Conservation and Natural Resources, which provided a planning grant under its Rivers Conservation Program in July 1995.

During the course of the study, Natural Lands Trust staff and other members of the partnership surveyed most of the Ridley Creek and its tributaries. Interviews were conducted with local, state and federal officials, and public input was solicited through press releases, newsletters, a public opinion survey and a series of public meetings, workshops and hearings. A free-standing committee called "Friends of the Ridley Creek" was formed and met several times during the planning process. This group continues to meet and has actively encouraged municipalities to implement the plan's recommendations.

The general principles of the Conservation Plan include raising the awareness of the value of the

Ridley Creek system and preserving the ecology and beauty of the watershed through the coordinated actions of the affected municipalities, agencies, landowners and private groups. The Plan stresses the importance of municipal actions in accomplishing its goals, which include:

- managing stormwater so that normal flooding along the creek and its tributaries does not cause major property damage, using wetlands, riparian buffers and vegetated swales to supplement or replace man-made structures wherever possible;
- maintaining and improving water quality;
- upgrading sewer treatment facilities, to ensure that water quality is not degraded;
- educating citizens and local officials as to the value of the watershed and its ecosystems;
- strengthening municipal zoning and land development regulations to ensure that any development that occurs is not detrimental to the stream;
- encouraging landowners to practice good land stewardship;
- improving public access to the Ridley Creek and its tributaries; and,
- preserving historic resources.

The Conservation Plan defines "conservation neighborhoods" where specific local initiatives (including greenway planning efforts) should be undertaken to achieve the plan's goals. It also includes several site-specific recommendations. The Plan has been endorsed by a majority of the municipalities within the watershed, and many of its recommendations have been implemented.

For additional information on the Ridley Creek Conservation Plan, please contact the the Natural Lands Trust (610-353-5587).

Conclusion

This report has discussed the benefits of developing an inter-municipal greenway plan and described the basic process behind greenway planning. Case studies describing several greenway planning initiatives, ranging from a plan involving four municipalities to a watershed-based plan covering 16 municipalities in two counties,

have been presented. Working cooperatively with neighboring communities to adopt and implement an Inter-municipal greenway plan and preserve open space can yield financial, ecological and cultural benefits for all of the region's residents.

Studies have shown that property values often increase in the vicinity of greenways and open space areas and, if adopted as a part of an overall growth management strategy, planning for a greenway can indirectly reduce municipal service costs to local governments by channeling growth into more appropriate areas. Additionally, communities can benefit from increased spending by users of the greenway.

Greenways preserve the environmental features of an area by providing natural protection from

flooding, improving water quality and providing habitats for plants and wildlife. They can provide scenic relief from the urban landscape, preserve the integrity of historic places and provide a host of recreational activities for residents. While economic and even ecological benefits can be quantified, the intrinsic value of greenways and open space in terms of their impact on the quality of life for the residents is immeasurable.

Greenway planning can raise awareness and concern for environmental, recreational and quality of life issues throughout the region. As the common thread linking municipalities together, greenways can foster inter-municipal cooperation and enhance the quality of life for residents throughout the Delaware Valley.

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Appendix A: Sources of Technical and Financial Assistance

Various federal, state, county and local agencies can provide most of the necessary data as well as valuable financial and technical assistance and are critical to effective inter-municipal greenway planning efforts. Public agencies that can provide support for greenway planning efforts include the following:

Municipal agencies and commissions:

- Local township committees
- Municipal planning boards and commissions
- Municipal parks and recreation departments and boards
- Environmental commissions or advisory councils
- Historic commissions
- Highway and public works departments
- Engineering departments

County agencies:

- County boards of commissioners (in Pennsylvania) or freeholders (in New Jersey)
- County planning commissions
- County engineering departments
- County park and recreation departments
- County conservation districts

Regional agencies:

- Metropolitan planning organizations (such as the Delaware Valley Regional Planning Commission; website address www.dvrpc.org)
- Economic development organizations
- Tourism promotion agencies
- Resource conservation and development councils

State agencies and commissions:

- Pennsylvania Department of Conservation and Natural Resources (www.dcnr.state.pa.us) including the Bureau of State Parks, the Bureau of Recreation and Conservation and the Bureau of Forestry
- Pennsylvania Department of Environmental Protection (www.dep.state.pa.us)
- Pennsylvania Department of Community and Economic Development, including the Center for Local Government Services (www.dced.state.pa.us)
- Pennsylvania Fish and Boat Commission (www.state.pa.us/fish)
- Pennsylvania Game Commission (www.pgc.state.pa.us)
- Pennsylvania Historical and Museum Commission (www.phmc.state.pa.us)
- Pennsylvania Department of Transportation (www.dot.state.pa.us)
- New Jersey Department of Environmental Protection (www.state.nj.us/dep), including the Division of Fish, Game and Wildlife, the New Jersey Historic Trust and the Division of Parks and Forestry
- New Jersey Office of Green Acres (www.state.nj.us/dep/greenacres)
- New Jersey Department of Community Affairs (www.state.nj.us/dca)
- New Jersey Historical Commission (www.state.nj.us/state/history)

- New Jersey Department of Transportation (www.state.nj.us/dot)
- New Jersey Natural Lands Trust
- State Departments of Labor and Industry

Federal agencies:

- Army Corps of Engineers (www.usace.army.mil)
- United States Department of Agriculture, Forest Service (www.fs.fed.us)
- United States Environmental Protection Agency (www.epa.gov)
- National Park Service (www.nrc.nps.gov)
- Surface Transportation Board (www.stb.dot.gov)
- Department of Labor (www.dol.gov)

In addition to these public agencies and commissions, numerous **non-governmental agencies** actively promote greenways and trails and provide invaluable assistance to municipalities and groups interested in planning for a greenway within their own community. These include the following:

- Pennsylvania Environmental Council, which manages a number of partnerships including the Pennsylvania Greenways Commission and the Greenspace Alliance (www.pecpa.org)
- Pennsylvania Cleanways
- Association of New Jersey Environmental Commissions (ANJEC)
- Local area Chambers of Commerce

Appendix B: Potential Grant Opportunities for Funding Open Space Planning and Acquisition

Listed below are potential federal, state and private funding sources for greenway and open space planning and implementation. In addition to these public and private grant programs, financial assistance may be available through the region's counties, many of which provide funding through open space trust funds. Local businesses can also provide invaluable assistance in sponsoring facilities and events along a greenway or trail. For example, businesses could sponsor (through a financial donation) certain sections of a trail; provide trail amenities such as benches, bike parking racks or storage facilities (with their name prominently displayed as a contributor); or offer community events such as trail clean-ups, nature walks or trail competitions.

FEDERAL

National Parks Service: Rivers, Trails and Conservation Assistance Program (RTCA)

Eligible projects: trail design; greenway plans; stream restoration; cultural, natural and recreational resource inventories; consultations and conservation workshops.

Eligible applicants: community groups, municipalities, partnerships.

Type of assistance: provides technical assistance and staff involvement rather than financial assistance.

Required match: projects are undertaken as partnerships and costs are shared with other organizations; cost-sharing arrangements may involve financial contributions or in-kind services.

Application round: ongoing assistance offered to applicants developing proposals; July deadline for formal applications for assistance, prior to beginning of the fiscal year on October 1st.

Telephone: 215-597-0932

Website: www.nps.gov/rtca

Wetlands Reserve Program of the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)

Eligible applicants: landowners (NRCS will determine final eligibility)

Eligible projects: land with the potential to contribute to desired ecosystem functions and values which are agricultural lands with restorable wetlands; former or degraded wetlands occurring in range and forest production land; riparian areas that connect with protected wetlands along streams and other waterways; adjacent lands that will contribute significantly to an existing wetlands' function and value; wetlands that were previously restored under a state or federal restoration program; or privately developed wetlands that meet NRCS restoration standards.

Maximum grant: the program offers landowners three options: a permanent easement, a 30-year easement or a cost-share agreement in lieu of an easement. Easement payment is for the either agricultural value of the land, an established cap or an amount offered by the owner. Restoration projects are fully funded by the NRCS for permanent or 30-year easements and are funded from between 50% and 75% for non-easement agreements.

Required match: 25% to 50% for non-easement agreements; none for easement acquisition. The landowner is responsible for protecting the wetland within the easement area; public access to the area is not always required. Acceptable uses for the area may include hunting, fishing, timber harvesting, grazing or haying, depending on the situation.

Application round: ongoing

Telephone: 908-735-0733

Website: www.nrcs.usda.gov

Environmental Protection Agency Environmental Education Grant Program

Eligible applicants: government agencies, school districts, colleges and universities, and non-commercial broadcasting entities.

Eligible activities: educational activities that enhance the public's awareness of environmental issues and provide the knowledge and skills necessary to make responsible and informed decisions about issues that affect environmental quality, including but not limited to training educators; designing and demonstrating field methods, educational practices and techniques; designing, demonstrating or disseminating educational curricula; and fostering international cooperation in addressing the environmental issues facing the United States, Canada and Mexico.

Maximum grant: approximately \$3 million was available for FY 2000; 25% must go to small grants of \$5,000 or less, and the maximum allowable amount per project is \$250,000.

Required match: minimum of 25% of total project cost.

Application round: notice usually published late August-early September; applications due mid-November; grants awarded late May-early June.

Telephone: 1-202-260-89619

Website: www.epa.gov/enviroed

PENNSYLVANIA STATE PROGRAMS

Pennsylvania Department of Conservation and Natural Resources: Keystone Grants Program

This agency provides a host of grant opportunities through the Growing Greener initiative, including the Community Grant Program (for the purchase of land for park, recreation and conservation purposes; the rehabilitation of existing parks and recreation facilities; and the creation of new recreation facilities); the Rails-to-Trails Program (for the purchase of abandoned rail rights-of-way for public recreational trail use; the purchase of adjacent land for access or related support facilities; and the rehabilitation and development of abandoned rights-of-way for public trail use); Land Trusts Grants (for acquiring and planning of open space and natural areas that face imminent loss); the Rivers Conservation Grant Program (to study watersheds, rivers, streams or creeks); and Heritage Parks Grants.

Eligible projects: land acquisition, facilities construction, long-range plan development, feasibility studies or implementation projects.

Eligible applicants: municipalities, non-profit organizations.

Maximum grants: \$7,500 for peer-to-peer projects; no limit for planning, implementation or technical assistance.

Required match: minimum of 25% (for Heritage Parks Grants); most require a minimum of 50%.

Application round: late fall.

Telephone: 215-560-1182

Website: www.dcnr.state.pa.us

Pennsylvania Department of Conservation and Natural Resources: Recreational Trails Program

Eligible applicants: local governments, state and federal agencies, organizations and individuals

Eligible projects: land acquisition, development of trails and trail-head facilities, trail maintenance and making trails accessible for use by the disabled.

Maximum grant: \$20,000

Required match: 50%.

Application round: late fall.

Telephone: 717-787-2316.

Website: www.dcnr.state.pa.us

NEW JERSEY STATE PROGRAMS

New Jersey Green Acres Program

Eligible applicants: municipalities and counties

Eligible projects: open space acquisition and outdoor recreation facilities development

Application round: varies

Types of assistance: the program offers assistance in five different project categories (the standard program, the planning incentive program, the urban aid program, the non-profit organization program and the tax-exempt program), each of which offers different combinations of loans and grants and each of which has different match requirements (varying from none to 50%).

Telephone: 609-984-0500

Website: www.state.nj.us/dep/greenacres

New Jersey Office of Environmental Services Matching Grants Program

Eligible applicants: local environmental agencies.

Eligible projects: projects that promote the protection of natural resources by inventorying those resources, preparing policy recommendations to protect them and by preparing and disseminating information about the ways in which the public can participate in protecting the environment. The program has previously funded natural resource inventories, water quality studies, master plan and zoning ordinance amendments, open space plans, greenway planning efforts and public education programs.

Maximum grant: \$2,500

Required match: 50%

Application round: typical deadline is early December for awards during the following year.

Telephone: 609-984-0828

New Jersey Office of Environmental Planning: Non-Point Source Pollution Control and Management Implementation (Section 319(h) grants)

Eligible applicants: regional comprehensive planning or health organizations and coalitions of municipal and county governments and/or local or county environmental commissions, watershed associations and non-profit organizations.

Eligible projects: projects that implement best management practices which have been proven to work either in the proposed project or in another area with similar environmental conditions; or projects that provide mechanisms that teach people to implement best management practices or non-point source pollution management programs.

Maximum grant: varies; at least \$850,000 is available annually statewide

Required match: 20% of the total project amount, which may consist of cash, in-kind services or a combination of both.

Application round: varies

Contact: NJDEP's Office of Environmental Planning, 609-292-2113

NJDEP Clean Lakes Program

Eligible applicants: municipal, county and regional government agencies.

Eligible projects: projects that improve the recreational quality of public lakes.

Maximum grant: up to 70% USEPA funding for Phase I Diagnostic Feasibility projects; up to 50% state funding for Phase I Diagnostic Feasibility projects. Up to 50% USEPA funding for Phase II Implementation projects; up to 75% state funding for Phase II Implementation projects.

Application round: typically September 1 each year.

Contact: NJDEP's Office of Water Monitoring Management, 609-292-0427.

FOUNDATIONS

William Penn Foundation

Eligible applicants: non-profit organizations with 501(c)(3) status

Eligible projects: any projects that support the goals of promoting open space preservation; promoting the development, maintenance and use of natural areas within Philadelphia; or that support environmental education.

Maximum grant: grants range from a few thousand dollars to several million, depending on the size of the organization and the scope of the project.

Required match: no match is required, but the Foundation prefers to fund projects that receive support from several sources and that do not depend on them for total funding.

Telephone: 215-988-1830.

Conservation Foundation: American Greenways Dupont Award

Eligible applicants: primarily non-profit organizations, although individuals and municipalities may apply

Eligible activities: mapping; assessments; surveying; conferences and design activities; printed and audio-visual outreach materials; building paths and bridges

Maximum grant: \$2,500

Required match: none

Application round: typically December 31

Telephone: 703-525-6300.

Dodge Foundation

Eligible applicants: non-profit organizations with 501(c)(3) status

Eligible projects: projects that focus on sustainability, ecosystem preservation, energy conservation, pollution prevention and reduction, and environmental education and outreach activities

Maximum grant: none, although grants generally range from \$10,000 to \$100,000

Required match: none

Application round: a one-page letter of inquiry is recommended to ensure that the project falls within the Foundations guidelines; formal applications are due by September 15 each year.

Telephone: 201-540-8442.

Philadelphia Foundation

Eligible applicants: non-profit organizations

Eligible projects: projects that promote land and energy conservation and support the urban environment

Maximum grant: \$25,000

Required match: none

Application round: there are two annual distribution cycles, but agencies may apply only once each year. Proposal deadlines are November 1 or June 1.

Telephone: 215-563-6417

Pew Charitable Trust

Eligible applicants: non-profit organizations with 501(c)(3) status that are also classified as charitable under section 509(a) of the IRS Code.

Eligible projects: projects whose goals are to reduce the use and production of highly persistent toxic substances that adversely affect the environment and public health, and projects that halt the further destruction of forests and marine ecosystems in North America.

Maximum grant: most grants range between \$50,000 and \$250,000.

Required match: none

Application round: proposals accepted year round.

Telephone: 215-575-4744.

Environmental Endowment for New Jersey

Eligible applicants: preference for non-profits with 501(c)(3) status, but other non-profits are eligible as well.

Eligible projects: research, litigation, public education and other activities that promote conservation or preservation of land and natural resources and improved air and water quality.

Maximum grant: \$20,000

Required match: none

Application round: typically November announcement with applications due in January.

Telephone: 609-737-9698

New Jersey Conservation Foundation Matching Mini-Grant Program

Eligible applicants: non-profit groups such as emerging land trusts, citizen groups and greenway planning groups.

Eligible projects: land planning, land acquisition, acquisition of conservation easements.

Maximum grant: \$5,000

Required match: 50%

Application round: typically announced in October or November with applications due four to six weeks after the announcement.

Telephone: 908-234-1225

Schumann Fund for New Jersey

Eligible applicants: non-profit organizations with 501(c)(3) status.

Eligible projects: projects that support the protection of natural resources, environmental quality and wildlife.

Maximum grant: environmental protection grants usually range from \$10,000 to \$80,000.

Required match: none, but preference is given to proposals with a high level of commitment (in terms of time and/or financial resources) from the group requesting the grant.

Application round: proposals are reviewed quarterly.

Telephone: 201-509-9883

Victoria Foundation (New Jersey)

Eligible applicants: non-profit organizations with 501(c)(3) status.

Eligible projects: Land acquisition projects must be eligible for consideration by the New Jersey Green Acres Program, must have passed their initial screening process and must be in active consideration by the Green Acres Program. Special consideration is given to projects that will protect wetlands and transitional areas, farmland, critical wildlife habitats, headwaters, exceptional ecosystems, watershed lands and aquifer recharge areas. Other eligible projects include environmental education and leadership training, environmental research, public education and advocacy, and resource conservation.

Maximum grant: grants may be used toward all or part of the 50% match required for land acquisition under the Green Acres program, usually up to \$500,000. Funding for other projects typically ranges from \$8,000 to \$50,000.

Required match: for land acquisition, must have a Green Acres grant as a match; other projects require no match.

Application round: ongoing

Telephone: 201-783-4450

