



**A**ppendix D, Project Development Protocol and Process, consists of the following items:

- D.1 Example Application to Nominate Project;
- D.2 Example Application to Request Technical Assistance;
- D.3 Example “Master Project List”;
- D.4 Funding Spreadsheet;
- D.5 Susquehanna Greenway Components;
- D.6 Available GIS Layers;
- D.7 Resource Protection Methods; and
- D.8 Liability

**D.1 Example Application to Nominate Project**

SUSQUEHANNA GREENWAY PROJECT NOMINATION

Part A – CONTACT INFORMATION

- 1. Name of Nominees(s) \_\_\_\_\_
- Title \_\_\_\_\_
- Organization \_\_\_\_\_
- Address \_\_\_\_\_
- \_\_\_\_\_
- Email \_\_\_\_\_
- Phone \_\_\_\_\_ Fax \_\_\_\_\_

Part B – PROJECT INFORMATION

- 2. Title of Project \_\_\_\_\_
- Type of Greenway Project \_\_\_\_\_
- Region \_\_\_\_\_
- Counties \_\_\_\_\_
- Has this project been nominated before? Yes \_\_\_\_ No \_\_\_\_
- 3. Brief Project Description \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Part C – BENEFITS OF PROJECT

Provide bulleted list of project benefits describing why this would be a good addition to the Susquehanna Greenway Network



**D.2 Example Application to Request Technical Assistance****SUSQUEHANNA GREENWAY TECHNICAL ASSISTANCE REQUEST****Part A – CONTACT INFORMATION**

1. Name of Applicant(s) \_\_\_\_\_
- Title \_\_\_\_\_
- Organization \_\_\_\_\_
- Address \_\_\_\_\_
- \_\_\_\_\_
- Email \_\_\_\_\_
- Phone \_\_\_\_\_ Fax \_\_\_\_\_

**Part B – GENERAL PROJECT INFORMATION**

2. Title of Project Requiring Technical Assistance \_\_\_\_\_
- \_\_\_\_\_
- Type of Greenway Project \_\_\_\_\_
- Region \_\_\_\_\_
- Counties \_\_\_\_\_
- Project selected from “Master Project List” by partnership? Yes \_\_\_ No \_\_\_
- Funding Source(s) Acquired? Yes \_\_\_ No \_\_\_
- Supporting Agencies/Organizations \_\_\_\_\_

**Part C – PROJECT OBJECTIVES**

Provide bulleted list of objectives for this project including greenway relevance

**Part D – PROPOSED PROJECT TIMELINE / COST ESTIMATE**

Proposed big picture timeline  
 Proposed project cost and any in-kind matches available  
 –include volunteer and donations

**Part E – TYPE OF TECHNICAL ASSISTANCE REQUESTED**

D.3 Example “Master Project List”

Region	Status	Project Name	Project Category	Type of Greenway Component	Involved Counties	Description	Proposed Users
Middle	a	North Branch Canal Trail	Recreational Opportunity	Historical/Cultural Preservation/Restoration / Trails	Northumberland, Montour, Columbia	Multi-use trail that follows the remnants of the historic North Branch Canal	Hiking/Biking/Public Access Waypoint
North		Wyoming County Water Access Point	Recreational Opportunity	Water Access Point	Wyoming	Access point along the Susquehanna-Expressed need and interest by community	Motorized and Non-motorized Water Access
Middle	a	Sunbury Riverfront	Community Conservation/Recreational Opportunity	Trails/Streetscaping/Passive Recreation/Community and Economic Development	Northumberland	Ampetheatre, schulling, botanical garden, trails, great community support and potential impact	Pedestrian/Biking/Gathering/Public Access Waypoint
Lower	a	Blue Rock	Education and Outreach	Historical Interpretation	York	Existing Water Access and Historical Mill adding heritage center for ecological, historical, and cultural education and interpretation	Public Access Waypoint
Lower		Chickies Rock	Community Conservation/Education and Outreach	Historical/Cultural Preservation/Restoration / Landscape/Resource Protection / Historical Interpretation	Lancaster	Scenic area with existing historical remnants-saw mills, iron furnances, architecture	Public Access Waypoint
West	a	Bakerstown AMD Cleanup	Resource Management	Reclamation/Remediation	Cambria	Passive treatment of Acid Mine Drainage seep at the Bakerton Rod and Gun Club - treated water will be used for pond for club's fising derby.	Limited Access Conservation
West		Headwaters Bicycle Tour	Recreational Opportunity	Trails	Cambria/Indiana /Clearfield	First in a series of Susquehanna bike tours/Building tour infrastructure/View scenic, historical, and cultural features of river valley	Biking
West		Sinnamahoning Rest Area	Recreational Opportunity	Water Access/Passive Recreation		DOT rest area with the potential for non-motorized access and primitive camping	Public Access Waypoint/Non-motorized Water Access
West	a	Williamsport Riverwalk	Community Conservation/Recreational Opportunity	Water Access / Trails / Community/Economic Development	Lycoming	Motorized water access, trail development along the Susquehanna-improve cities connection to river	Motorized Water Access / Public Access Waypoint / Biking / Pedestrian

North	<b>a</b>	French Asylum Visitor's Center	Community Conservation	Historical/Cultural Preservation/Restoration	Wyoming	New Visitor's Center at existing French Asylum Historic Waypoint	Public Access Waypoint
Lower		Turkey Hill Trailhead and Trails	Recreational Opportunity	Trails/Facilities and Amenities		Trail to Safe Harbor, partially along abandoned railroad and partially along ridges	Hiking/Biking
Middle		Indian Head Campground Revitalization and Canal Restoration	Recreational Opportunity/ Education and Outreach	Passive Recreation/Water Access/ Historical/Cultural Preservation/Restoration/ Historical Interpretation	Columbia	Existing campsite and water access to add historical canal interpretive site	Public Access Waypoint / Motorized Water Access?
North		Tioga Point Campground and Overlook	Recreational Opportunity	Passive Recreation	Wyoming?	Existing rustic overlook adding campground and improving existing presentation	Public Access Waypoint
Middle		Susquehanna Warrior Trail	Recreational Opportunity	Trails			Hiking/Biking
West		Pine Creek Rail Trail	Recreational Opportunity	Trails			Hiking/Biking
Middle		Canal Restoration Trail	Recreational Opportunity/ Education and Outreach	Trails/ Historical Interpretation	Snyder	Highlights scenic, historic, and cultural features between Selinsgrove and Haldeman	Hiking/Biking
Lower		Forest Legacy Project	Resource Management	Landscape/Resource Protection/ Habitat Rehabilitation/Restoration	York	Preserve and enhance 600 foot overlook and significant wildlife habitat	Limited Access Conservation
Lower		Susquehanna Riverlands Project	Resource Management / Recreational Opportunity	Landscape/Resource Protection/ Passive Recreation		Land Acquisition of over 500 acres to create an open space/park	Public Access Waypoint
Lower	<b>a</b>	Duncannon - Apple Tree Alley	Community Conservation/ Recreational Opportunity	Trails/Landscape/Passive Recreation/ Cultural Preservation/ Historical Interpretation	Perry	Creation of a pedestrian walkway through the community of Duncannon - that could become the Appalachian Trail route	Pedestrian/Bicycle/Community Park
Middle		Muncy Canal Heritage Park	Community Conservation/ Recreational Opportunity/ Education and Outreach	Trails/Landscape and Cultural Preservation/ Historical Interpretation	Lycoming	Development of Heritage Park with canal remnants and overview of 'last raft' crash site, with walking trails and interpretive programming	Pedestrian/Heritage Tourists







D.4 Funding Spreadsheet

Organization / Agency	Grant or Program	Website/Contact	Resource Management								Community Conservation						Recreational Opportunity					Education and Outreach					Funding Description	Individual	Public Group	Government	Non-Profit				
			Land Acquisition	Landscape/Resource Protection	Conservation Corridors	Reclamation/Remediation	Wildlife Habitat (Rehabilitate/Restore)	Pollution Control/Prevention	Stormwater Management/Flood Prevention	Vegetation	Community and Economic Development	Facility and Service Improvements	Travel and Tourism	Historical and Cultural Preservation/Restoration	Streetscaping	Neighborhood Revitalization/Rehabilitation	Future Planning and Ordinances	Trails	Recreational Areas or Fields	Facilities/Amenities	Management and Maintenance	Water Access	Restoration and Rehabilitation of Existing Sites	Future Planning	Environmental Education/ Interpretation	Historical and Cultural Education/ Interpretation						Guide Maps	Brochures and Booklets	Website	Signage
	Pennsylvania Recreational Trails Program Grants	<a href="http://www.dcnr.state.pa.us/brc/grants/general02.aspx">http://www.dcnr.state.pa.us/brc/grants/general02.aspx</a>	✓													✓	✓	✓	✓	✓	✓								20% match for funding is required for projects. However, a 50% funding match is required for land acquisition. Donations and in-kind services are permitted as a match. Projects for motorized or non-motorized use include maintenance and restoration of existing recreational trails, development and rehabilitation trails and trailhead facilities and trail linkages, purchase and lease of recreational trail construction and maintenance equipment, construction of new recreational trails, and acquisition of easements or property for recreational trails or recreational corridors.		✓	✓	✓		
	Growing Greener	<a href="http://www.dcnr.state.pa.us/brc/grants/gg-grants.aspx">http://www.dcnr.state.pa.us/brc/grants/gg-grants.aspx</a>	←								→						→					→					Program partners with DEP		✓	✓	✓				
	Rivers Conservation Program	<a href="http://www.dcnr.state.pa.us/brc/rivers/riversconservation/">http://www.dcnr.state.pa.us/brc/rivers/riversconservation/</a>	✓	✓	✓	✓	✓																						All projects must be river related and have an approved River Conservation Plan before applying			✓	✓		
	Community Conservation Partnership Grants (C2P2)	<a href="http://www.dcnr.state.pa.us/grants/htm">http://www.dcnr.state.pa.us/grants/htm</a>	✓													✓	✓	✓	✓	✓	✓								50% match of funding is required for greenway and park planning, design and development, land acquisition, and construction. Small community grants are also available for design and material costs, requiring only a 10% match of funding.						
	Urban and Community Forestry Grants	<a href="http://www.dcnr.state.pa.us/forestry/ucfc/grants.html">http://www.dcnr.state.pa.us/forestry/ucfc/grants.html</a>							✓																				Will fund 50% of the cost to purchase and deliver a tree. Technical assistance is also available. Training available to complete street tree inventories and other projects in urban and community forestry.		✓	✓	✓		
Pennsylvania Department of Economic and Community Development	DECD website	<a href="http://www.newpa.com.aspx">http://www.newpa.com.aspx</a>																																	
	Catalog of funding sources	<a href="http://www.newpa.com/programfinder.aspx">http://www.newpa.com/programfinder.aspx</a>																											Various grants and programs related to business, community, and site revitalization	✓	✓	✓	✓		
	Community Revitalization Program									✓	✓		✓	✓														Funding available to support local initiatives to improve community, quality of life, and business							
	Land Use Planning and Technical Assistance Program																											Funding available to prepare community conservation plans and ordinances.							
	Small Communities Planning Assistance									✓	✓		✓	✓														Funding available to municipalities with a population of 10,000 or less. No match required. Project must benefit low-moderate income residents				✓			
	Communities of Opportunity Program									✓	✓		✓	✓														Funding available to attract, expand, and maintain business, and provide affordable housing. No local match required.				✓			
	Community Development Block Grant									✓	✓		✓	✓														Financial and technical assistance available for infrastructure improvements, housing rehabilitation, public services, and community facilities. 70% of awarded funding must be used on projects benefiting low to moderate income residents.				✓			
	Main Street Program																											Program funds main street manager position to facilitate downtown revitalization activities and also funds 50% of actual improvement projects in the community. Business action plan must be completed prior to application.	✓			✓			
Pennsylvania Department of Environmental Protection	DEP website	<a href="http://www.dep.state.pa.us.htm">http://www.dep.state.pa.us.htm</a>																																	
	Catalog of funding sources	<a href="http://www.dep.state.pa.us/dep/deputate/pollprev/grantandloan.htm">http://www.dep.state.pa.us/dep/deputate/pollprev/grantandloan.htm</a>																																	
	Brownfields Inventory Grant	<a href="http://www.dep.state.pa.us/dep/deputate/airwaste/wm/landrecy/Inventory/BIG.htm">http://www.dep.state.pa.us/dep/deputate/airwaste/wm/landrecy/Inventory/BIG.htm</a>				✓																							Brownfield remediation						
Pennsylvania Department of Transportation (PENN DOT)	PENN DOT website	<a href="http://www.dot.state.pa.us.htm">http://www.dot.state.pa.us.htm</a>																																	
	Catalog of funding sources	<a href="http://www.dot.state.pa.us/grants.htm">http://www.dot.state.pa.us/grants.htm</a>	✓				✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓								Funding available for transportation enhancements related to greenways including transportation, historic preservation, bicycle/pedestrian improvements, and environmental quality.						
Pennsylvania Emergency Management Agency (PEMA)	PEMA website	<a href="http://www.pema.state.pa.us.asp">http://www.pema.state.pa.us.asp</a>																																	
	Hazard Mitigation Program Grants	<a href="http://www.pema.state.pa.us/pema/CWP/view.asp?a=1988&amp;q=230184&amp;pemaNavDLTEST=1471514749147521">http://www.pema.state.pa.us/pema/CWP/view.asp?a=1988&amp;q=230184&amp;pemaNavDLTEST=1471514749147521</a>	✓																										Funding requires a 25% local match in cash, in-kind services, or another grant, such as Community Development Block Grant. Acquisition available after a disaster occurs, but participation by land owners must be voluntary. Submittal must be through county government to PEMA and property ownership goes to the local government as open space. No further federal disaster assistance will be available to the property.				✓		
	Flood Mitigation Assistance	<a href="http://www.pema.state.pa.us/pema/CWP/view.asp?a=1988&amp;q=244086">http://www.pema.state.pa.us/pema/CWP/view.asp?a=1988&amp;q=244086</a>	✓																										Funding available to purchase properties before flooding occurs. Property must be insured by the National Flood Insurance Program. Funding also available to produce plan to reduce flood damage.				✓		
	Disaster Resistance Communities Program	<a href="http://www.pema.state.pa.us/pema/CWP/view.asp?a=1988&amp;q=244086">http://www.pema.state.pa.us/pema/CWP/view.asp?a=1988&amp;q=244086</a>	✓																										Funding available for a single municipality to a multi-county area to work together in order to assess risks and create a plan of action to reduce those risks.				✓		
Pennsylvania Historical and Museum Commission	PHMC website																																		
	Keystone Historic Preservation Grant Program	717-787-4363																											Preservation, restoration, and rehabilitation of historic sites-listed or eligible to be listed on the National Register of Historic Places. Requires a 50% funding match.				✓		
	Keystone Recreation, Park, and Conservation Fund	717-787-4363	✓																									Acquisition, development, and planning of recreation space and eligible activities							
	Pennsylvania History and Museum Grant Fund	717-787-4363																										National Register nominations, planning, and development assistance NOTE: Limited to smaller organizations							
	Certified Local Government Grants																												40% funding match required, but may be made with cash, in-kind services, or with funding from the Community Development Block Grant. Funding may be used for cultural resource surveys, technical and planning assistance, education and interpretive programming, and national register nominations.				✓		
<b>Local Agencies and Programs</b>																																			
County General Fund																																			
Municipal General Fund																																			
Special Bond Referendum																																			







D.5 Susquehanna Greenway Components

Resource Management	Community Conservation	Recreational Opportunities	Education and Outreach						
Landscape/Resource Protection scenic overlooks historic/cultural landscapes scenic landscapes/viewsheds ridgelines steep slopes class I and II soils large tracts of working lands significant natural features large tracts of forest lands floodplains	Community/Economic programs/events attracting new business/residents Facility/Service sewer improvements repaving streets repaving sidewalks water treatment improvements signage improvements mass/alternative transportation Travel/Tourism marketing/promoting downtown visitor center restaurants/hotels Historical/Cultural Preservation/Restoration historic waypoints cultural waypoints historic landscapes historic trails/corridors Streetscaping/Aesthetics mainstreet revitalization facade improvements lighting/benches/accessories walkways vegetation infill development Neighborhood Rehabilitation/Revitalization infill development adaptive reuse of structures improved housing neighborhood associations/watch open space/trail development programs/events	Trails multi-use bicycle lanes sidewalks hiking pedestrian fitness equestrian water Active Recreation recreational fields playgrounds courses-frisbee/golf/kavak Water Access non-motor access points motor access points fishing areas swimming areas Facilities/Amenities trailheads concessions picnic areas/pavilions/shelters restrooms benches/bike racks/trash/accessories Passive Recreation parks parklets greenspaces common spaces/community spaces vistas/viewpoints	Environmental Interpretation exhibits presentations/seminars books/brochures kiosks Historical Interpretation exhibits presentations/seminars books/brochures kiosks Guide Maps trails waypoints borough/city-hubs Brochures/Booklets waypoints rules and regulations about Susquehanna Greenway tourism events education Signage interpretive wayfinding/directional identification Website Susquehanna Greenway hubs-borough and city websites waypoints trails						
				Conservation Corridors riparian buffers wildlife corridors/hedgerows buffer zones (between land uses)	AMD sources/sites mine reclamation culm banks Brownfield site remediation	Habitat habitat rehabilitation habitat restoration species reintroduction	Pollution Control/Prevention air water erosion/sedimentation		
								Stormwater Management/Flood Prevention stormwater management flood prevention	Vegetation invasive species removal/control reintroduce native species plant native species



## D.6 Available GIS Layers

Data Layer	Status	Current Data Gaps/Issues	Source/Creator(s)	Creation Date	Projection
<b>Cultural/Recreational</b>					
Land Trails	Complete		Gary Bloss/PSU		St. Plane_PA_N
Water Trails	Complete		Gary Bloss/PSU		St. Plane_PA_N
River Access Points	Complete		Gary Bloss/PSU		St. Plane_PA_N
Network Hub	Complete		Gary Bloss/PSU		St. Plane_PA_N
Journey Point	Complete		Gary Bloss/PSU		St. Plane_PA_N
Points of Interest	Complete		Gary Bloss/PSU		St. Plane_PA_N
Scenic Assessment	Complete		Gary Bloss/PSU		St. Plane_PA_N
Airports	Complete				Albers EqArea
Hospitals	Complete		PA Dept of Health		Albers EqArea
Historic District Polygons	Complete		PA Historic and Museum Commission		Albers EqArea
Historic Sites/Landmarks/Buildings	Complete		PA Historic and Museum Commission		Albers EqArea
Dams	Complete		USGS		Albers EqArea
Cemeteries	Complete	Outdated	USGS		Albers EqArea
Churches	Complete	Outdated	USGS		Albers EqArea
Schools	Complete	Outdated	USGS		Albers EqArea
Quarries	Complete		USGS		Albers EqArea
Roads	Not Complete	Attribute needed for North Branch and Main Stem	Counties and PennDOT		Albers EqArea
Railroads	Complete		Counties and DEP		Albers EqArea
Parcels	Not Complete	Not all counties complete	Counties, SEDA-COG, Others		Albers EqArea
<b>Natural/Environmental</b>					
Natural Area Inventories	Not Complete	Not all counties complete	Nature Conservancy and Western PA Conservancy (County)		
Open Space (Parks, Preserved Land)	Complete		Gary Bloss/PSU		St. Plane_PA_N
Surgo Soils	Not Complete	Not all counties complete	USDA NRCS		Albers EqArea
Surface Geology	Complete		USGS		Albers EqArea
Floodplains	Complete		DEP		Albers EqArea
Wetlands	Complete		NWI, US Fish and Wildlife Service		Albers EqArea
National Forest	Complete		DEP		Albers EqArea
Hydrography	Not Complete	Stream name attributes not completed	Counties and DEP		Albers EqArea
State Forest	Complete		DEP		Albers EqArea
Coal Mines	Complete		DEP		Albers EqArea
Mine Problem Areas	Complete		DEP		Albers EqArea
<b>Other</b>					
Digital Elevation Model	Complete		USGS		Albers EqArea
Steep slope	Complete		USDA		Albers EqArea
Aerial Photography	Complete		USGS		UTM Zone 17, 18
<b>Layers to Acquire or Develop</b>					
Local Parks		Useful for more local level planning	Potentially available from municipalities		
Campgrounds		Useful for more local level planning	Potentially available from municipalities		
Trailheads/Parking Areas		Useful for more local level planning	Potentially available from municipalities		
Contours		Useful for more local level planning	Potentially available from municipalities; Or DEM-derived		
Others					

## D.7 Resource Protection Methods

### Regulatory Mechanisms:

This type of resource protection method is used to shape the use of the land without transferring or selling land. The rules for this type of tool are established and enforced by a governing body.

<b>DEVELOPMENT IMPACT FEE / EXTRACTION</b>		
Description	Advantage	Weakness
<p>Formula is created to account for</p> <ul style="list-style-type: none"> <li>• Area of land affected</li> <li>• Number of units built</li> <li>• Expected market value of units</li> <li>• Distance from fire/police</li> <li>• Cost of building roads</li> <li>• Construction induced population growth</li> </ul> <p>Form of payment may be</p> <ul style="list-style-type: none"> <li>• Money</li> <li>• Infrastructure and amenities -streets, sewers, street lighting, parks, trails</li> <li>• Preserving resources by not developing certain portions of land</li> <li>• Case by case basis</li> </ul>	<p>“Pay as you go” method helps municipalities keep pace with land development</p> <p>Municipalities may implement elements from Master Plans, Open Space Plans, or Recreational Plans as development occurs and with developer’s finances</p>	<p>May be difficult to implement-must meet Supreme Court ruling for “fair and equitable” implementation</p> <p>May be politically challenging – the developer or the development</p>
<b>TRANSFER OF DEVELOPMENT RIGHTS</b>		
Description	Advantage	Weakness
<p>To prevent urban sprawl, municipalities designate as “sending” or “receiving.”</p> <p>“Sending zones”</p> <ul style="list-style-type: none"> <li>• Rural areas</li> <li>• Agricultural preservation zones</li> <li>• Environmentally sensitive areas</li> </ul> <p>“Receiving zones”</p> <ul style="list-style-type: none"> <li>• Easier to serve areas (water/sewer, fire/police)</li> <li>• Areas close to borough or city limits</li> </ul> <p>Landowners in “sending zones” can voluntarily sell developmental rights to landowners in “receiving zones” or to a third party, preventing development of the designated “sending zone.”</p>	<p>Potentially effective growth management tool</p> <p>“Sending zone” protects large tracts of land</p> <p>Urban/Suburban sprawl is reduced and concentrated in more appropriate areas</p>	<p>Complicated program to establish and administer</p> <p>Requires professional staff to oversee program</p> <p>May create resistance or disagreement with land owners</p> <p>May require legislation</p> <p>Unproven technique</p>



<b>RIGHT TO FARM AND RANCH</b>		
Description	Advantage	Weakness
<p><i>To protect existing agricultural operations against suits claiming the neighboring farm or ranch is a nuisance due to odor, noise, dust, flies, application of agricultural chemicals, or slow moving machinery.</i></p> <p><i>Exemptions</i></p> <ul style="list-style-type: none"> <li>• <i>Operation begins after neighboring land uses exist</i></li> <li>• <i>Operation is out of compliance with local, state, or federal regulations</i></li> </ul>	<p>Legal protection to encourage continuation of agricultural land use</p> <p>Prevents good agricultural land and soils from becoming sprawl in rapidly growing communities</p>	<p>Not a long-term protection method</p> <p>Landowners must continue operation</p>
<b>URBAN GROWTH BOUNDARY</b>		
Description	Advantage	Weakness
<p><i>Municipalities create a boundary beyond which development may not occur</i></p> <ul style="list-style-type: none"> <li>• <i>Limit of urban infrastructure (water and sewer)</i></li> <li>• <i>Usually identifies 10-20 year “land supply” / buildable land</i></li> </ul>	<p>Limits sprawl</p> <p>Encourages more compact development</p> <p>Integration with TDR program preserves open space</p>	<p>Requires strong regional cooperation</p> <p>Controversial / down zoning required outside boundary</p> <p>Raises land and housing costs inside boundary</p>
<b>LARGE LOT ZONING</b>		
Description	Advantage	Weakness
<p>Development spread over large area</p> <p>5-10 acre minimum building lots</p>	<p>Maintains low density</p> <p>Reduces development impact on some resources (water)</p> <p>Provides flexibility in design and location to allow site protection</p>	<p>Factor in suburban sprawl</p> <p>Open space is private / not connected</p> <p>Resources scattered</p> <p>Forest fragmentation / Habitat destruction</p> <p>High real estate prices</p>
<b>CLUSTER DEVELOPMENT</b>		
Description	Advantage	Weakness
<p>High density development/compact form to preserve open space</p>	<p>Protects resource areas with flexible design options</p> <p>Construction / infrastructure costs are reduced</p>	<p>Voluntary</p> <p>Protected lands may become scattered and fragmented</p> <p>Clustering may not be popular</p> <p>Long-term management of open space may be problematic for HOA</p>

<b>MANDATORY DEDICATION OF OPEN SPACE</b>		
Description	Advantage	Weakness
Developers are required to <ul style="list-style-type: none"> <li>• Dedicate portion of subdivided property (1/35 acre per dwelling)</li> <li>• Pay fee for open space, greenway, park</li> </ul>	Open space is protected  Recreation lands are acquired at little cost to the public	Applies only to subdivisions and PUD's  Limited effectiveness in preserving large tracts or corridors
<b>PERFORMANCE ZONING</b>		
Description	Advantage	Weakness
Requires impact assessment of proposed development projects  Zoning categories based on permissible impacts to natural or historical resources (instead of permitted uses)	Development directed to resource compatible areas  Many uses may be permitted in a single zone-flexibility in type and design	Requires a detailed land use plan  Requires staff to administer program  Effectiveness based on knowledge of resource / effects of permissible impacts
<b>BONUS / INCENTIVE ZONING</b>		
Description	Advantage	Weakness
Developers can build additional units in exchange for preserving designated resource lands  Technique applied to cluster developments and TDR programs	Encourages sensitive site design to protect resources  Maintains open space and rural character	Requires careful infrastructure planning to prevent sprawl  Dependence on wells/septic  Conservation value limited if higher density is permitted
<b>CONSERVATION OVERLAY ZONES</b>		
Description	Advantage	Weakness
Designate an area as a special "district" / zone  Establish stricter/additional development standards to protect: <ul style="list-style-type: none"> <li>• Historic districts</li> <li>• Landscape features</li> <li>• Scenic views</li> <li>• Agricultural areas</li> <li>• Watersheds</li> </ul>	Effective in protecting specific resources from development pressures	Must define standards clearly to be useful in resource protection  Zoning can be changed  Does not address protection/preservation outside district
<b>VOLUNTARY AGRICULTURAL DISTRICT</b>		
Description	Advantage	Weakness
Special "district" designation to promote continuation of agriculture and forestry activities  Most effective if several operations participate in areas with development pressure	Encourage continuation of agricultural and forestry land use  Provides some protection against nuisance suits	Voluntary  Minimum acreage criteria  No long-term protection



Acquisition of Open Space:

This type of method is permanent. Methods can be divided into two categories:

1. Landowners retain ownership of the land and preserve a resource through an easement or other mutual agreement
2. Land ownership and management is transferred from a landowner to a conservation agency (local government, land trust, or other preservation organization)

<b>PURCHASE OF DEVELOPMENT RIGHTS (PDR)</b>		
Description	Advantage	Weakness
Owner voluntarily sells land development rights to local government or land trust for financial incentive	<p>Proven technique for communities to acquire land for preservation</p> <p>Participants receive an income and continue to use their land</p> <p>Participants retain all other rights to their land</p> <p>Property taxes should be reduced</p>	<p>Expensive to purchase development rights</p> <p>Rarely protects enough land to reduce development pressures on resource</p> <p>Funding may not meet demand for easement purchases</p> <p>Voluntary-some resources may be lost</p>

<b>PURCHASE OF MINING RIGHTS AND OTHER EASEMENTS</b>		
Description	Advantage	Weakness
<p>Owner voluntarily sells mining rights to local government or land trust for financial incentive</p> <p>Other customized easements could be developed to protect the resource</p> <p>Scenic view sheds and forested buffers</p>	<p>Less expensive than fee-simple or PDR</p> <p>Participants receive an income and continue to use their land</p>	<p>Mineral rights management must be resolved</p> <p>Limited in the protection of open space</p>

<b>CONSERVATION EASEMENT</b>		
Description	Advantage	Weakness
<p>To protect a specific sensitive natural, historical, or cultural resource, an agreement is made between landowner and conservation agency to voluntarily restrict the use and development of land</p> <p>May be in effect for a specific period of time but usually perpetual</p> <p>Example: conservation, historic preservation, open space, or scenic easement</p>	<p>Effective in preserving open space (if it meets mutual goals of landowner and conservation agency)</p> <p>Easements are tailored to landowner and resource needs/goals</p> <p>Participants retain landownership and all other rights and uses to their land</p> <p>Financial incentive for donation or bargain sale of easement</p> <p>Easements stay with land regardless of ownership changes</p> <p>Reduced costs when easement is acquired at less than fair market value</p>	<p>Baseline survey required to identify the extent of natural, historical, or cultural resources</p> <p>Less protection than outright acquisition</p> <p>Easement purchases may be costly</p> <p>Terms must be carefully and clearly outline</p> <p>Requires management to:</p> <ol style="list-style-type: none"> <li>1. Monitor and enforce easement</li> <li>2. work closely with land owners</li> <li>3. have technical expertise and financial wherewithal</li> </ol> <p>Easement restrictions may limit resale opportunities</p>



<b>LEASE</b>		
Description	Advantage	Weakness
To protect and manage a sensitive resource, an agreement is made between landowner and conservation agency to rent land	<p>Low cost approach</p> <p>Participants retain landownership and all other rights and uses to their land</p> <p>Participants receive an income</p> <p>Alternative for conservation minded landowners not ready to commit to the sale of an easement</p> <p>Restrictions can be included in lease to direct activities of conservation agency</p>	Short –term protection-leases are not permanent
<b>FEE SIMPLE ACQUISITION</b>		
Description	Advantage	Weakness
Sale of land at full market value and transfer of ownership and responsibilities to conservation agency	<p>Straight forward</p> <p>Conservation agency receives full control over future of land</p>	<p>Most expensive</p> <p>Buyer assumes full responsibility for care and management of land</p> <p>Loss of revenue when land is removed from tax rolls</p> <p>Capital gains issues for seller</p>
<b>BARGAIN SALE</b>		
Description	Advantage	Weakness
<p>Sale of land at less than fair market value</p> <p>Difference between sale price and market value becomes a donation on behalf of the landowner</p>	<p>Reduced acquisition cost</p> <p>Seller may qualify for tax benefits for charitable donation</p> <p>May offset capital gains</p> <p>Conservation agency receives full control over future of land</p>	<p>Difficult and time-consuming to negotiate</p> <p>May still be costly to acquire land</p>
<b>INSTALLMENT SALE</b>		
Description	Advantage	Weakness
Sale of land to conservation agency where percentage of sale is deferred and paid over a successive years	<p>Conservation agency eventually receives full control over future of land</p> <p>Possible capital gain for seller</p>	Complications to finance and budget payment for land



<b>RIGHT OF FIRST REFUSAL</b>		
Description	Advantage	Weakness
Conservation agency has option to match any other offers presented to landowner to purchase and acquire land	Conservation agency has more time to acquire funds for purchase	Resource may be lost if offer cannot be matched Some landowners are unwilling to enter into this type of binding agreement

<b>UNDIVIDED INTEREST</b>		
Description	Advantage	Weakness
Several parties share ownership of land Each owner's interest extends over entire parcel	Changes to property cannot be made unless all owners agree	Management may be complicated

<b>LAND BANKING</b>		
Description	Advantage	Weakness
Conservation agency identifies and purchases resource lands and reserves it for later use, development, or resale Land can be leased for immediate use Recreation field, agriculture Programs may be funded through real estate transfer tax	Lowers future preservation costs- defense against land price increases, speculation, and inappropriate development	Expensive-up front cost Management to handle acquisition, lease, and resale Require local legislation to use real estate transfer tax

<b>ACQUISITION AND SALEBACK OR LEASEBACK</b>		
Description	Advantage	Weakness
Conservation agency acquires land, places protective restrictions or covenants on the land, and resells or lease the land	Proceeds from sale/lease offset costs Land may be more buyer friendly-lower sale price- after restrictions are added Management of property transfers to new owner	Complicated Owner loses some control over property Leases may not be favorable for some resource lands

**Land Donation:**

All or some of the land rights and responsibilities are donated to a conservation agency by the landowner.

<b>OUTRIGHT DONATION</b>		
Description	Advantage	Weakness
Landowner grants full title and ownership to a conservation agency	Conservation agency receives land for little or no cost Conservation agency may receive an endowment for long-term land stewardship Donor may qualify for tax incentives	Landowner receives no financial compensation from sale of land Conservation agency receives long-term management and financial responsibility for land
<b>DONATION VIA BEQUEST</b>		
Description	Advantage	Weakness
Land title and ownership is donated to a conservation agency at the owner's death through a will	Reduces estate and inheritance tax Owner retains use of land while alive Protection is ensured after death	No income tax deduction with donation through will Requires careful estate planning by land owner
<b>DONATION WITH RESERVED LIFE ESTATE</b>		
Description	Advantage	Weakness
Landowner retains the right to use all or part of land for remaining lifetime and the lifetimes of designated family members	Owner and designated family members retain use of land while alive Protection is ensured after death	Tax benefits are limited Some types of open space may not qualify Delay of land transfer to conservation agency



Management Agreements:

Mutual agreements made between parties with the ultimate goals of:

1. Protecting the resource
2. Designating the most capable entity to manage the land

<b>INTERGOVERNMENTAL PARTNERSHIP</b>		
Description	Advantage	Weakness
Federal, state, and local agencies form joint partnerships to own and manage land	<p>Able to protect large and more expensive properties</p> <p>Fosters regional cooperation to protect open space</p>	<p>Partners must agree on management strategies</p> <p>Agency budgets and acquisition criteria may restrict acquisitions</p> <p>Procedures to follow creates slower response/action to acquire</p> <p>May remove land from tax base</p>
<b>AGENCY TRANSFER</b>		
Description	Advantage	Weakness
Government transfers excess land to another agency better suited to assume resource protection and management responsibilities	Resource protection and management with little added expenditures	<p>Excess property may not be suitable for resource protection</p> <p>Agency may want fair market value for property</p>
<b>LAND EXCHANGE</b>		
Description	Advantage	Weakness
Land may be exchanged for another parcel that is more desirable for resource protection	<p>Lower acquisition costs</p> <p>Scattered properties may be exchanged for larger parcel</p>	<p>Complicated process</p> <p>Not widely known/used</p> <p>Subject to IRS regulations</p> <p>Property owners must be willing to participate</p> <p>Land must be of equal or lesser value</p>
<b>NONPROFIT ACQUISITION AND CONVEYANCE TO PUBLIC AGENCY</b>		
Description	Advantage	Weakness
Non-profit organization buys a land parcel and resells the land to a government or public agency	<p>Non-profits can act more quickly to purchase</p> <ul style="list-style-type: none"> <li>- Non-profits can hold land until public agency is ready to purchase</li> <li>- Could reduce acquisition costs for public agency</li> </ul>	Local government must be able to purchase and manage lands

<b>JOINT VENTURE PARTNERSHIP</b>		
Description	Advantage	Weakness
<p>Strategy used by public agencies and private organizations to accomplish projects serving mutual goals.</p> <p>Example: Match government grant program with private contributions and public funds</p>	<p>Partners share benefits, responsibilities, and costs of acquisition and management</p> <p>Creates coalition of support to protect diverse resources</p> <p>Brings diverse sources of knowledge and expertise to solve issues</p>	<p>Complicated property management and decision making</p> <p>Conflicts in acquisition criteria</p> <p>Conflicts in funding priorities</p>
<b>MANAGEMENT AGREEMENT</b>		
Description	Advantage	Weakness
<p>Agreement between landowner and conservation agency to manage property and achieve resource conservation goals</p>	<p>Owner may be eligible for direct-payments, cost sharing assistance, or other technical assistance from agency</p> <p>Management plan is based on owner's preservation aims.</p>	<p>Mutual agreement is more easily terminated than a lease.</p> <p>Agreements are not permanent</p>
<b>MUTUAL COVENANTS</b>		
Description	Advantage	Weakness
<p>Mutually agreed upon restrictions between adjoining land owners to control future land uses</p>	<p>Permanent</p> <p>Can be enforced by any landowner</p> <p>Significant incentives to comply</p> <p>Can reduce property tax</p>	<p>Loss in value does not qualify as charitable donation/tax deduction</p>



## D.8 Liability

There are two primary categories of people who might be concerned about liability issues related to the Susquehanna Greenway: managing and owning entities (typically public) and private landowners. Private landowners can be divided into two categories, those who have provided an easement and those who own land adjacent to the Greenway. In either situation, private landowners may have some concerns about the liability should a user stray onto their land and become injured. In the first instance, where an easement is granted, the concern may be over injuries on both the granted right-of-way as well as injuries that may occur on land under their control that is adjacent to the Greenway. Where the landowner has no ownership interest, the landowner will be concerned with injury to the users wandering onto their property and getting hurt.

Landowners may reduce their liability by taking the following actions:

- Design Greenway features around or away from potential hazards to minimize risks
- Make it clear that Greenway users are not invited onto adjoining land. (This can be aided with signs, vegetative screening, or fencing.)
- If hazardous conditions exist near the Greenway, signs should be developed to warn trail users of the hazard if it cannot be mitigated

If a landowner provides an easement for public use, the easement contract should specify that the managing agency would carry liability insurance, will design to recognized standards, and will develop and carry out a maintenance plan. Abutting property owners frequently express concerns about their liability to Greenway users. In general, their liability, if any, is limited and is defined only by their own actions in relation to the Greenway.

### *Forms of Protection*

There are three legal precepts, either alone, or in combination, that define and in many cases limit liability for injury resulting from use of the Greenway. The first is the concept duty of care, which speaks to the responsibility that a landowner (public or private) has to anyone on his or her land. Second is the Recreational Use Statute (RUS), which is available in all 50 states and provides protection to private and some public landowners who allow free public access to land for recreational purposes. For those public entities not covered by a RUS, states tend to have a tort claim act, which defines and limits governmental liability. Third, for all private and public parties, liability insurance provides the final line of defense.

### *Duty of Care*

Tort law, with regard to finding fault for an incident that occurs in a particular location is dependent on the classification of the injured person: trespasser, licensee, invitee, or child.

- Trespasser: -a person on land without the landowner's permission, whether intentionally or by mistaken belief that they are on public land. (Lowest level of liability)
- Licensee: -a person on land with the owner's permission but only for the visitor's benefit. (Low level of liability-landowner must provide warning of known unsafe conditions)
- Invitee: -a person on the owner's land with the owner's permission, expressly or implied for the owners benefit, such as a paying customer. (Highest level of liability-landowner owes the payee a safe experience)
- Children: -a child is also classified under one of the previous three categories. (Highest level of liability-regardless of whether or not the child is trespassing, protection is awarded to a child)

### ***Recreational Use Statutes (RUS)***

The Council of State Governments produced a model recreational use statute (RUS) in 1965 in an effort to encourage landowners to make their land available for public recreational purposes by limiting their liability provided they do not charge a fee. The RUS limits the duty of care a landowner would otherwise owe to a recreational licensee to keep his or her premises safe for use. It also limits a landowner's duty to warn of dangerous conditions provided such failure to warn is not considered grossly negligent, willful, wanton, or reckless. The result of many of these statutes is to limit landowner liability for injuries experienced by people partaking in recreational activities on their land. The existence of RUS may also have the effect of reducing some insurance premiums for landowners whose land is used for recreation.

The preamble of the model RUS is clear that it was designed for private landowners but the actual language of the model legislation does not differentiate between private and public landowners. However, under the Federal Tort Claims Act, the federal government is liable for negligence like a private landowner under the law of the state. As a result, RUS's intended for private individuals has been upheld applicable to the federal government where it has opened land up for public recreation.

### **Risk Management**

Overall, the best defense against an injury related lawsuit is a sound policy and practice for maintenance and usage. Greenway components that are properly designed and maintained go a long way to ward off any potential liability. There are some general design guidelines, for example AASHTO and MUTCD for trail systems, that if adhered to, can provide protection by showing that conventional standards were used in the design and construction and may be able to take advantage of any design immunities under state law.

The managing agency should also develop a comprehensive maintenance plan that provides for regular maintenance and inspection by a qualified person who has the expertise to identify hazardous conditions and maintenance problems. These procedures should be spelled out in detail and a record should be kept of each inspection including what was discovered and any corrective actions taken. Maintenance problems should be quickly resolved or warning signs should be posted until the problem is addressed and corrected. The goal is to ward off or eliminate any hazardous situations before an injury occurs. Procedures for handling medical emergencies should be developed. The procedures should be documented as well as any occurrence of medical emergencies.

During Greenway Design and Development:

- Develop an inventory of potential hazards
- Identify who the users are, what the users needs are, and what activities will be occurring for each Greenway component
- Identify all applicable laws
- Design and locate all Greenway features such that obvious dangers are avoided
- Design and construction of Greenway components should be completed by persons who are knowledgeable about applicable design guidelines
- Rules and regulations should be posted and enforced

### *Use of Volunteers*

The Federal Volunteer Protection Act of 1997 protects volunteers of non-profit organizations or governmental entities. The Act states that such volunteers are not liable for harm caused by their acts of commission or omission provided the acts are in good faith. Also, the landowner should be protected from any user injury created by an act of a volunteer provided the act is not one of willful or reckless misconduct. However, for all public and private entities, the safest action is to obtain liability insurance coverage and make sure it covers volunteer workers.