



— CONEWAGO CREEK
— INITIATIVE

Conservation Toolbox for Municipalities

A guide to developing and implementing land and water conservation programs.



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Conservation Toolbox: Introduction

The Conewago Creek Initiative

The Conewago Creek Initiative is a locally-led, collaborative partnership effort in the Conewago Creek watershed in Dauphin, Lebanon, and Lancaster Counties of Pennsylvania that seeks to improve water quality in the Conewago Creek watershed. The Initiative works with local residents in the community to increase awareness of and interest in adopting land management practices that will improve water quality of local streams, ensure healthy farms, forests, and communities, and protect and maintain quality of life.

A Vision for the Conewago

In 2010, the Initiative sponsored a “visioning process” for the Conewago Creek watershed. More than 100 stakeholders of the Conewago Creek watershed community provided input over a 3 month period, creating a vision for their home, community, and watershed. The consensus building approach used in this visioning process established multiple priorities aimed to achieve and maintain a healthy Conewago Creek watershed. These priorities include clean water, viable and productive agriculture, green open spaces, vibrant and well planned communities, and enhanced outdoor recreational opportunities. Each priority is interrelated to the other priorities and reflects the connectivity between the community and the watershed. The *Vision for the Conewago* is the product of a constructive, inclusive process that identified unique opportunities in the watershed to be valued and protected and issues that need to be addressed:

The Conewago watershed community has envisioned a future that establishes the restored Conewago and its tributaries as a centerpiece of pride and a treasured asset in a rural landscape. This vision includes a strong agricultural community and productive farmland, community recreation areas and vibrant, well-planned communities. Pristine landscapes will be protected while providing sustainable uses of natural resources, clean water and streams, and educational opportunities for generations to come.

Implementing the Vision: The Municipal Toolbox

Municipalities are leaders in shaping local communities and implementing the visions of their residents. By embracing watershed management approaches to decision making and program development, municipalities of the Conewago can help make the watershed one that their residents desire and deserve.

The Conewago Initiative has put together this toolbox to provide ideas and guidance on how to make improvements to your community and the Conewago Creek. The tools are organized by the five key goals developed to meet the vision for the Conewago watershed. For each tool, three tiers are provided, each describing various levels of municipal involvement and investment needed. Links to resources, suggestions on possible partners, and contact information for someone who can help you get started is provided for each tool.

Municipalities can play a key role in protecting watersheds and water resources. This guide can help you get started. For more information, questions, or to start building a partnership, visit the Conewago Creek Initiative’s website at www.conewagoinitiative.net or email us at conewagocreekinitiative@gmail.com.



Conservation Toolbox: How to Use this Toolbox

Meet with Conewago Creek Initiative Representatives

The Conewago Creek Initiative representatives will be glad to meet with you to discuss the Initiative's goals and objectives and determine where mutual interests exist within your municipality.

Review Toolbox and Select Tools to Implement

Initiative representatives will review the Toolbox with you, and determine which tools you may be interested in implementing, and what tiers match your desired goals for implementation.

Develop Your Customized Toolbox

Based on these conversations, Initiative representatives will develop your own customized toolbox, and a pathway for moving forward to implement the priority conservation tools in your community.

Develop Implementation Plan and Implement Tools

To implement one or more of the tools you have selected, you will need to develop a plan for implementation and take ownership of the tools you have committed to implementing. Implementation steps may be rather simple for certain tools, while others will be more complex and involve consideration of the following steps:*

Step 1: Develop your implementation plan. There are several considerations in developing your plan, including:

- Identifying the objectives you wish to accomplish
- Determining municipal support needed and who will provide it (such as the municipal manager)
- Assessing personnel needs
- Establishing the priority of desired programs

Step 2: Formulate and pass resolutions if needed. Resolutions may be necessary to formally indicate municipal support.

Step 3: Cultivate volunteers. Advertise the need for volunteers and appoint interested volunteers to serve. Once volunteers are in place, provide guidance on how to function as a municipal committee.

Step 4: Support volunteers in implementing tools successfully. The municipal manager, staff and/or elected officials should constantly support group meetings and functions to ensure successful program accomplishments and continued growth of the volunteer committee.

*These steps were shared by Rugh Henderson, Township Supervisor, South Londonderry Township, based on the township's experiences in successfully establishing an Environmental Advisory Council (EAC) and volunteer natural areas program.



Conservation Toolbox: Strengthen Community

Through education, intergovernmental cooperation and commitment of human and economic resources.

Tool 1: Conewago Creek Initiative Partner

A member organization of the Conewago Creek Initiative, a collaborative partnership of organizations working together to pool resources and work with Conewago residents, farmers and businesses to increase adoption of practices that will improve and protect water quality. Partners include representatives from the local, state, national, and private organizations, agencies, and businesses.



Tier One	Tier Two	Tier Three
<p>Contact the Initiative and determine a partner role for your municipality. Determine teams on which you may be interested in serving.</p>	<p>Attend Initiative meetings and share your input. Promote the Initiative on your website and municipal newsletters.</p>	<p>Actively promote Initiative programs to residents. Encourage participation by advertising and taking an active role.</p>

RESOURCES

[Conewago Creek Initiative](http://www.conewagoinitiative.net) (www.conewagoinitiative.net)

PARTNERS

<p>Penn State Extension Dauphin, Lancaster and Lebanon County Conservation Districts USDA NRCS Tri-County Conewago Creek Association</p>	<p>PA DEP US Geological Survey US Fish and Wildlife Service Environmental Protection Agency Chesapeake Bay Foundation ZedX, Inc.</p>	<p>LandStudies, Inc Wild Resources, Inc. Elizabethtown College PA Department of Agriculture USDA Agricultural Research Service PA DCNR</p>
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CONTACT

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Notes:



Conservation Toolbox: Strengthen Community

Through education, intergovernmental cooperation and commitment of human and economic resources.

Tool 2: Watershed Education Program

A program to educate municipal residents on voluntary actions they can take in their own backyards to improve water quality. The program could involve regular speakers, educational events and activities, and volunteer tree plantings and clean ups.



Tier One	Tier Two	Tier Three
Partner with other groups engaged in watershed education programs and co-sponsor events.	Host events to promote watershed education within your municipality. Organize a tree planting, bring in speakers to discuss natural resource related topics, or have a rain barrel workshop.	Survey residents and tailor programs to meet needs and interests. Develop onsite programs with landowners interested in hosting events.

RESOURCES

[Land Choices](http://www.conservationtools.org/guides/show/18-PA-Land-Choices) (www.conservationtools.org/guides/show/18-PA-Land-Choices)

[The EAC Network](http://www.eacnetwork.org) (www.eacnetwork.org)

PARTNERS

Conewago Creek Initiative
County Conservation Districts
Governor Dick Env't'l Center

Lancaster County Conservancy
Manada Conservancy
Penn State Cooperative Extension

South Londonderry Twp EAC
Tri-County Conewago Creek Assoc.

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Conservation Toolbox: Strengthen Community

Through education, intergovernmental cooperation and commitment of human and economic resources.

Tool 3: Conewago Stream Teams

A 4-H youth watershed education program for K-12 with a focus on the Conewago watershed. Education topics include water conservation, water properties, and water quality. New teams can be formed or programs can be developed for existing youth groups.



Tier One	Tier Two	Tier Three
<p>Promote Conewago Stream Teams by displaying brochures at municipal buildings and other public places and providing information on municipal website. Run article in municipal newsletter.</p>	<p>Invite program director and existing Stream Teams in municipality to municipal community events, such as annual meetings, National Night Out, community fairs, etc.</p>	<p>Actively promote Stream Teams with existing youth organizations in municipality. Sponsor a municipal Stream Team.</p>

RESOURCES

[4-H Stream Teams](http://ecosystems.psu.edu/youth/4-h-stream-teams) (http://ecosystems.psu.edu/youth/4-h-stream-teams)

[Conewago Creek Initiative website: Youth Education Page](http://www.conewagoinitiative.net/?page_id=79) (www.conewagoinitiative.net/?page_id=79)

PARTNERS

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Conservation Toolbox: Strengthen Community

Through education, intergovernmental cooperation and commitment of human and economic resources.

Tool 4: Farm Tours

Public tours of area farms that give community neighbors a chance to learn about the dynamics of a farm and see how farmers sustain a farming operation on a daily basis. Farm tours help build community, promote agriculture and conservation and serve as an educational tool for youth and adults.



Tier One	Tier Two	Tier Three
Attend a farm tour led by a neighboring community to learn the benefits a farm tour can provide.	Organize area farm tour or work with interested partners to promote one.	Organize regular farm tours, putting emphasis on farm management practices that improve the health of waters downstream.

RESOURCES

[The Joy of Farm Watching: A Roadside Guide to PA Agriculture](http://pubs.cas.psu.edu/freepubs/pdfs/ue010.pdf) (<http://pubs.cas.psu.edu/freepubs/pdfs/ue010.pdf>)

[Finding the Common Ground](http://www.pubs.cas.psu.edu/FreePubs/pdfs/ua309.pdf) (www.pubs.cas.psu.edu/FreePubs/pdfs/ua309.pdf)

PARTNERS

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Notes: _____

Tool 5: Environmental Advisory Council (EAC)

A group of 3-7 community residents, appointed by local elected officials, that advises the local planning commission, park and recreation board and elected officials on the protection, conservation, management, promotion and use of natural resources within its territorial limits.



Tier One	Tier Two	Tier Three
Meet with peers and partners to form an EAC and appoint members.	Work proactively with EAC to develop a plan of action related to sustainable use and management of natural resources.	Work with EAC to fulfill the plan of action and promote conservation and protection of natural resources within the municipality

RESOURCES

[EAC Network](http://eacnetwork.org/about-eacs/) (http://eacnetwork.org/about-eacs/)

[Conservation Tools](http://conservationtools.org/guides/show/1-Environmental-Advisory-Council) (http://conservationtools.org/guides/show/1-Environmental-Advisory-Council)

[The EAC Handbook](http://handbook.eacnetwork.org/) (http://handbook.eacnetwork.org/)

[Pennsylvania Environmental Council](http://www.pecpa.org/about_us) (http://www.pecpa.org/about_us)

PARTNERS

PA Environmental Council

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South Londonderry Township

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Notes:

Tool 6: Multi Municipal Watershed Workgroup

A workgroup of municipal officials from municipalities within the Conewago Creek Watershed. The workgroup's purpose is to exchange information and facilitate cooperation on projects, programs, and activities related to land and water conservation.



Tier One	Tier Two	Tier Three
Reach out to neighboring municipalities to develop partnerships and share ideas about land and water conservation.	Form a workgroup of interested municipalities and hold a kickoff meeting.	Meet on a regular basis to exchange information and collaborate. Work with the Conewago Creek Initiative to leverage other resources and partners.

RESOURCES

[Conewago Creek Initiative](http://www.conewagoinitiative.net/) (http://www.conewagoinitiative.net/)

[Lancaster County Clean Water Consortium](http://www.lccwc.com/) (http://www.lccwc.com/)

[Conservation Tools](http://conservationtools.org/guides/show/90) (http://conservationtools.org/guides/show/90)

PARTNERS

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Notes:

Tool 7: Natural Resource Inventory

The mapping and description of natural resources and sensitive areas within a municipality that can facilitate the proper use of resources and guide future land development and redevelopment.



Tier One	Tier Two	Tier Three
<p>Work with partners such as County Planners to discuss and develop methodology for conducting, prioritizing and mapping the inventory.</p>	<p>Conduct, prioritize, and map Natural Resources Inventory.</p>	<p>Create a final report and maps that can be referenced when creating a plan for development. Use the inventory when making decisions.</p>

RESOURCES

[Conservation Tools](http://conservationtools.org/guides/show/61) (http://conservationtools.org/guides/show/61)

[SmartConservation](http://www.natlands.org/services/for-municipalities/smartconservation/) (http://www.natlands.org/services/for-municipalities/smartconservation/)

[New Jersey Guide on ERI](http://www.anjec.org/pdfs/EnvironmentalResource04.pdf) (http://www.anjec.org/pdfs/EnvironmentalResource04.pdf)

[Hellam Township Example ERI](http://bit.ly/12yLrTs) (http://bit.ly/12yLrTs)

PARTNERS

County Planning Offices

Conewago Creek Initiative

Natural Lands Trust

Manada Conservancy

Lebanon Valley Conservancy

Lancaster County Conservancy

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Notes:

Tool 8: Agricultural Security Area

An area where agriculture is the primary activity and farmers are entitled to special protection from condemnation, laws and ordinances that would unreasonably restrict farming operations.



Tier One	Tier Two	Tier Three
<p>Promote Agricultural Security Areas (ASA) and work with willing landowners who would be interested in securing a minimum of 250 acres on their combined properties to create an ASA.</p>	<p>Create an ASA Advisory Committee to review applications. Accept, modify, or reject the proposal made by interested landowners.</p>	<p>Expand the amount of land placed in an ASA within the municipality by reaching out to landowners who have larger operations. Review current ASAs every 7 years.</p>

RESOURCES

[Agricultural Area Security Handbook](http://www.co.lancaster.pa.us/toolbox/lib/toolbox/ASA_HANDBOOK1.pdf) (http://www.co.lancaster.pa.us/toolbox/lib/toolbox/ASA_HANDBOOK1.pdf)

[Conservation Tools](http://conservationtools.org/guides/show/49) (http://conservationtools.org/guides/show/49)

PARTNERS

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Chuck Wertz Lebanon County Conservation District, (717) 272-3908 ext 4, charles.wertz@lccd.org

Notes: _____

Tool 9: Agricultural Zoning

Agricultural zoning preserves the availability of agricultural lands for farming and thus the agricultural base of the community by steering nonagricultural development and land uses to designated areas.



Tier One	Tier Two	Tier Three
<p>Evaluate current zoning ordinances and determine whether they are adequately preserving agriculture within the municipality.</p>	<p>Revise the ordinances that need to be changed to better preserve farmland and the agricultural base of the community. Determine if any new ordinances or zoning districts should be created to further achieve agricultural goals.</p>	<p>Adopt new or revised agricultural zoning ordinances. Enforce and promote these ordinances in your municipality.</p>

RESOURCES

[Lancaster County Smart Growth Toolbox: Agricultural Zoning District Guidelines](http://bit.ly/1896Usv) (<http://bit.ly/1896Usv>)

[Conservation Tools: Agricultural Protection Zoning](http://conservationtools.org/guides/show/67-Agricultural-Protection-Zoning) (<http://conservationtools.org/guides/show/67-Agricultural-Protection-Zoning>)

PARTNERS

County Planning Commissions

Conewago Creek Initiative

PA Land Trust Association

Brandywine Conservancy

CONTACT

Dean Severson Lancaster County Planning Commission, (717) 299-8333, serversod@co.lancaster.pa.us

Notes: _____

Tool 10: Conservation and Agricultural Easements

Voluntary, recorded agreements that limit the type or amount of development on a property while allowing the landowner to retain private ownership of the land. Conservation easements preserve a natural resource while agricultural easements preserve active farmland.



Tier One	Tier Two	Tier Three
<p>Promote conservation and agricultural easements and the benefits that may come from preserving a plot of land.</p>	<p>Develop relationship with local land trust to hold educational workshops on the benefits of easements.</p>	<p>Develop municipal program to hold conservation and agricultural easements.</p>

RESOURCES

[Conservation Tools](http://conservationtools.org/guides/show/19-Conservation-Easement) (http://conservationtools.org/guides/show/19-Conservation-Easement)

[Conservation Tools Library](http://conservationtools.org/libraries/1/topics/77) (http://conservationtools.org/libraries/1/topics/77)

[The National Conservation Easement Database \(NCED\)](http://nced.conservationregistry.org/) (http://nced.conservationregistry.org/)

[Using Conservation Easements to Preserve Open Space](http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_002310.pdf) (http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_002310.pdf)

PARTNERS

Conewago Creek Initiative
County Conservation Districts
County Ag Preservation Boards

Lancaster County Conservancy
Lebanon Valley Conservancy
Manada Conservancy

Lancaster Farmland Trust

CONTACT

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Notes:

Tool 11: Land Acquisition

The purchase of land for purposes of recreation, conservation, and preservation of open space. Land acquisition provides open space and precludes development of environmentally sensitive land.



Tier One	Tier Two	Tier Three
Develop a relationship with local land conservancy and work with them to acquire priority property.	Develop a strategic plan for open space protection in municipality.	Finance land acquisition through issuance of open space bonds and/or pursuit of land acquisition grants.

RESOURCES

[Conservation Tools](http://conservationtools.org/libraries/1/topics/76) (<http://conservationtools.org/libraries/1/topics/76>)

PARTNERS

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Notes:

Tool 12: Comprehensive Plan

A written document that identifies the goals, objectives, principles, guidelines, policies, standards, and strategies for the growth and development of the community.



Tier One	Tier Two	Tier Three
<p>Profile the municipality. This involves conducting community surveys and public meetings to analyze culture, population, transportation, housing, environment and other resources.</p>	<p>Develop the plan and include a vision statement and a set of goals based on the characteristics of the municipality. Include strategies, policies and programs to reach the future goal of the community.</p>	<p>Review plan and hold another public meeting for additional comment. Adopt and begin working to implement the Comprehensive Plan.</p>

RESOURCES

[The Comprehensive Plan in Pennsylvania](http://www.adamswatersheds.org/images/comp_plan.pdf) (http://www.adamswatersheds.org/images/comp_plan.pdf)

[Pennsylvania Municipalities Planning Code](http://www.dep.state.pa.us/hosting/growingsmarter/MPCCode%5B1%5D.pdf) (http://www.dep.state.pa.us/hosting/growingsmarter/MPCCode%5B1%5D.pdf)

[Conservation Tools](http://conservationtools.org/guides/show/58-Planning-Land-Use-Ordinance-Basics) (http://conservationtools.org/guides/show/58-Planning-Land-Use-Ordinance-Basics)

PARTNERS

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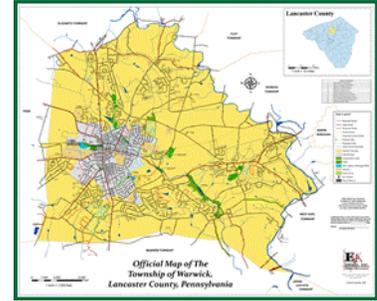
CONTACT

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Notes:

Tool 13: Official Map

A combined map and ordinance designating locations of planned future public lands and facilities such as streets, trails, parks and open space. Used to help implement the Comprehensive Plan and to give the municipality the right to negotiate for property they have interest in using for public purposes.



Tier One	Tier Two	Tier Three
<p>Adopt or update the Comprehensive Plan for the municipality (Tool 11). Begin outreach to the public about the municipality's plan to create an Official Map.</p>	<p>Create an Official Map that identifies areas of high priority in at least one section of the municipality.</p>	<p>Expand the Official Map to include other priority goals and locations within the municipality. Update ordinances to reference and support the Official Map.</p>

RESOURCES

[What is an Official Map?](http://conservationtools.org/guides/show/60-Official-Map) (http://conservationtools.org/guides/show/60-Official-Map)

[The Official Map Handbook](http://conservationtools.org/libraries/1/library_items/931) (http://conservationtools.org/libraries/1/library_items/931)

PARTNERS

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PA Land Trust Association

CONTACT

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Notes: _____

Tool 14: Green Ordinances

Any ordinances that are revised or adopted to better manage and protect natural resources while encouraging more sustainable land use.



Tier One	Tier Two	Tier Three
<p>Evaluate the current ordinances in place and determine which ones will need to be changed to allow and/or ensure that stormwater and natural resources are managed correctly.</p>	<p>Revise the ordinances that need to be changed to better manage stormwater runoff. Determine if any new ordinances should be created to further achieve the goal of stormwater management.</p>	<p>Adopt new or revised stormwater and land use ordinances. Enforce and promote these green ordinances in your municipality.</p>

RESOURCES

- [Lancaster County Smart Growth Toolbox](http://www.co.lancaster.pa.us/toolbox/site/default.asp) (http://www.co.lancaster.pa.us/toolbox/site/default.asp)
- [Conservation Tools: Planning and Land Use Ordinance Basics](http://conservationtools.org/guides/show/58-Planning-Land-Use-Ordinance-Basics) (http://conservationtools.org/guides/show/58-Planning-Land-Use-Ordinance-Basics)
- [Conservation Tools: Steep Slope Ordinances](http://conservationtools.org/libraries/1/topics/110) (http://conservationtools.org/libraries/1/topics/110)
- [Conservation Tools: Other Green Ordinances](http://conservationtools.org/libraries/1/topics/46) (http://conservationtools.org/libraries/1/topics/46)
- [Brandywine Conservancy Municipal Assistance Program](http://www.brandywineconservancy.org/map.html) (http://www.brandywineconservancy.org/map.html)

PARTNERS

- Conewago Creek Initiative
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Notes: _____

Tool 15: Conservation By Design

“Conservation subdivision” ordinances that plan development around natural resources and set aside at least half of every development parcel as open space, accelerating land conservation in growing communities at little public cost.



Tier One	Tier Two	Tier Three
Learn the benefits of Conservation by Design. Perform a community assessment to evaluate current land use regulations and identify strengths and weaknesses regarding open space protection.	Pull information from Open Space and Comprehensive Plans to create a composite map of potential conservation lands. Within this map, identify Primary and Secondary Conservation Areas.	Change land-use regulations to require conservation of open space. Work with developers to make sure Conservation by Design is being used.

RESOURCES

- [Conservation by Design: How it Works](http://www.natlands.org/services/for-municipalities/conservation-through-zoning/how-it-works/) (http://www.natlands.org/services/for-municipalities/conservation-through-zoning/how-it-works/)
- [Growing Greener—Conservation By Design](http://conservationtools.org/libraries/1/library_items/732-Introduction-to-Growing-Greener-Conservation-by-Design) (http://conservationtools.org/libraries/1/library_items/732-Introduction-to-Growing-Greener-Conservation-by-Design)
- [Conservation Subdivision Design Handbook](http://conservationtools.org/libraries/1/library_items/349-Conservation-Subdivision-Design-Handbook) (http://conservationtools.org/libraries/1/library_items/349-Conservation-Subdivision-Design-Handbook)
- [Conservation Tools: Growing Greener: Conservation By Design](http://conservationtools.org/guides/show/9-Growing-Greener-Conservation-by-Design) (http://conservationtools.org/guides/show/9-Growing-Greener-Conservation-by-Design)

PARTNERS

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Notes: _____

Tool 16: Transfer of Development Rights (TDR)

A program for selling and buying development rights of a property to encourage population growth in more appropriate locations based on the needs of the community.



Tier One	Tier Two	Tier Three
<p>Evaluate community plans for future development and conservation and determine which agricultural, natural, or historic resources should be included in TDR “sending” areas and which planned growth areas should be TDR “receiving” areas.</p>	<p>Amend municipal zoning ordinance to establish the TDR option and develop a market for TDRs. Educate landowners, realtors, developers on the advantages of TDR programs.</p>	<p>Partner with local land trusts and the County to promote use of the TDR tool and help with program administration. Consider establishing a TDR bank for holding municipally-acquired TDRs for future sale.”</p>

RESOURCES

[Ag Law Resource and Reference Center: Transfer of Development Rights](http://law.psu.edu/_file/aglaw/Transfer_of_Development_Rights.pdf) (http://law.psu.edu/_file/aglaw/Transfer_of_Development_Rights.pdf)

[Conservation Tools: Transfer of Development Rights](http://conservationtools.org/guides/show/12) (http://conservationtools.org/guides/show/12)

[Lancaster County Smart Growth Toolbox: Transfer of Development Rights](http://bit.ly/10YqDn2) (http://bit.ly/10YqDn2)

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Lancaster Co. Planning Comm.

CONTACT

John Theilacker Brandywine Conservancy, (610) 388-8389, jtheilacker@brandywine.org

Notes:

Tool 17: Municipal Parks, Trails, Greenways, Preserves

Public space designed to offer recreation and green space to residents and visitors of the municipality.



Tier One	Tier Two	Tier Three
<p>Assess existing parks, trails and preserves. Develop a plan to link these open spaces to create additional greenways.</p>	<p>Work with local partners to develop programs and pull resources to improve existing parks, trails and preserves.</p>	<p>Pursue funding for improvements to park/trail/preserve network.</p>

RESOURCES

[Creating Connections](http://conservationtools.org/libraries/1/library_items/192) (http://conservationtools.org/libraries/1/library_items/192)

[Pennsylvania Greenways](http://www.dcnr.state.pa.us/brc/conservation/greenways/) (http://www.dcnr.state.pa.us/brc/conservation/greenways/)

PARTNERS

Conewago Creek Initiative

Dauphin, Lancaster, and Lebanon

County Planning Commissions

Manada Conservancy

Lancaster County Conservancy

Lebanon Valley Conservancy

Lancaster County Department of

Parks and Recreation

Lebanon Valley Rails-to-Trails, Inc.

CONTACT

Kristen Kyler Penn State Extension, (717) 948-6609, klk343@psu.edu

Notes: _____

Tool 18: Parks and Recreation Committee

A committee consisting of volunteers appointed by the governing body that encourages the use and appreciation of open space resources and makes recommendations to the governing body concerning recreational programs and facilities.



Tier One	Tier Two	Tier Three
<p>Outreach to the community to learn who might be interested in participating in this committee.</p>	<p>Form a Parks and Recreation Committee and establish regular meetings and goals.</p>	<p>Listen to the recommendations made by this committee and support the programs and events they run.</p>

RESOURCES

[Conservation Toolbox: Recreation and Community Development](http://conservationtools.org/guides/group/12) (<http://conservationtools.org/guides/group/12>)

[DCNR: Keys to Success Stories in Community Recreation Initiatives](http://bit.ly/13QASOn) (<http://bit.ly/13QASOn>)

PARTNERS

**PA Department of Conservation
and Natural Resources**

Dauphin, Lancaster, and Lebanon
County Planning Commissions

CONTACT

Lori Yeich PA DCNR, (717) 705-5956 lyeich@pa.gov

Notes:

Tool 19: Agricultural Conservation Planning

Conservation plans are farm specific plans that set forth conservation best management practices and a schedule for implementation of such practices to prevent soil loss and preserve and maintain healthy and productive soils and water resources.



Tier One	Tier Two	Tier Three
Help promote conservation planning throughout the community, more specifically to farmers.	Partner with agriculture partners, such as the Conservation District, to promote education and awareness of requirements to create and implement conservation plans.	Enact ordinances to require conservation plans prior to issuance of building permits or other municipal approvals.

RESOURCES

[PA Ag Ombudsman: The Basics of Agricultural Erosion and Sedimentation Requirements](http://www.agombudsman.com/12compliance.pdf) (http://www.agombudsman.com/12compliance.pdf)

[Creating Conservation Plans for Farmland: Warwick Township Success Story](http://bit.ly/10tz75j) (http://bit.ly/10tz75j)

PARTNERS

County Conservation Districts

Warwick Township, Lancaster County

Conewago Creek Initiative

CONTACT

Jeff Hill Lancaster County Conservation District, (717) 299-5361 ext. 143, jeffhill@lanasterconservation.org

Notes: _____

Tool 20: Watershed Assessment and Restoration

An assessment of the watershed and the identification of potential watershed improvement projects, and the implementation of those projects working with willing landowners on a volunteer basis. Projects typically consist of agricultural best management practices, stormwater best management practices, or stream restoration practices (including riparian buffer restoration).



Tier One	Tier Two	Tier Three
<p>Meet with the watershed group and the Conewago Creek Initiative to review Conewago watershed assessment and restoration plan and evaluate high priority sites in the municipality.</p>	<p>Work with the Conewago Creek Initiative to help develop a plan for outreach to municipal landowners and encourage them to participate in watershed restoration projects.</p>	<p>Actively participate in outreach to landowners to promote watershed restoration. Provide funds to help fund restoration projects and match grants. Apply for grants to fund restoration practices.</p>

RESOURCES

[Conewago Creek Restoration Plan](http://bit.ly/13QtrmZ) (<http://bit.ly/13QtrmZ>)

[Tri County Conewago Creek Association: Restoration Projects](http://www.conewagocreek.net) (www.conewagocreek.net)

PARTNERS

Tri-County Conewago Creek Association

Conewago Creek Initiative

Dauphin, Lancaster, and Lebanon

County Conservation Districts

USDA NRCS

CONTACT

Kristen Kyler Penn State Extension, (717) 948-6609, klk343@psu.edu

Notes: _____

Tool 21: Stormwater Management Program

Develop programs to reduce the amount of stormwater runoff and pollutants that enter local waterways, as required by the municipal separate storm sewer (MS4) program. Education and outreach programs and incentives programs can be ways to encourage landowners to reduce the runoff from their properties.



Tier One	Tier Two	Tier Three
<p>Develop and implement a stormwater management program sufficient to meet the requirements of the municipal separate storm sewer system (MS4).</p>	<p>Work with Conewago Creek Initiative partners to develop educational materials, conduct outreach and provide opportunities to inform citizens about the impacts that stormwater runoff has on water quality.</p>	<p>Work with Conewago Creek Initiative partners to develop and implement an incentive program to encourage landowners to use green infrastructure to manage stormwater, as well as a plan for municipal sites.</p>

RESOURCES

- [PA DEP MS4 General Permit \(PAG-13\)](http://files.dep.state.pa.us/water/Watershed%20Management/WatershedPortalFiles/StormwaterManagement/PAG13/FinalPAG13.pdf) (http://files.dep.state.pa.us/water/Watershed%20Management/WatershedPortalFiles/StormwaterManagement/PAG13/FinalPAG13.pdf)
- [Municipal Handbook](http://water.epa.gov/infrastructure/greeninfrastructure/upload/gi_munichandbook_incentives.pdf) (http://water.epa.gov/infrastructure/greeninfrastructure/upload/gi_munichandbook_incentives.pdf)
- [Conewago Creek Initiative Stormwater Incentive Program](http://www.conewagoinitiative.net/practices/home/stormwater-incentives-program) (http://www.conewagoinitiative.net/practices/home/stormwater-incentives-program)

PARTNERS

Conewago Creek Initiative	Lancaster County Clean Water	Lebanon County Clean Water Alliance
County Conservation Districts	Consortium	PA DEP
County Planning Offices		

CONTACT

Kristen Kyler Penn State Extension, (717) 948-6609, klk343@psu.edu

Notes: _____

Tool 22: Source Water Protection Program

A program and ordinances that help safeguard community health and reduce the risk of contamination of water supplies. Reducing the amount of pollutants that enter groundwater aquifers will reduce the amount of treatment needed to meet drinking water standards.



Tier One	Tier Two	Tier Three
Develop a source water protection plan and allow for public comment.	Create a source water protection ordinance from the developed source water protection plan.	Enforce the source water protection ordinance and reevaluate to ensure that source water is being protected by this ordinance.

RESOURCES

[PRWA: Source Water Protection Program](http://www.sourcewaterprotection.org/) (http://www.sourcewaterprotection.org/)

[PRWA: Source Water Protection Ordinances](http://www.sourcewaterprotection.org/Step_4/ordinances.html) (http://www.sourcewaterprotection.org/Step_4/ordinances.html)

[EPA Source Water Protection](http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/index.cfm) (http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/index.cfm)

[Wellhead Protection Program in PA](http://bit.ly/16eQO0D) (http://bit.ly/16eQO0D)

[Water Resources Education Network \(WREN\)](http://wren.palwv.org/) (http://wren.palwv.org/)

PARTNERS

PA DEP

Water Resources Education
Network (WREN)

PA Rural Water Association

US EPA

Susquehanna River Basin
Commission

CONTACT

Joe Hebelka PA DEP, (717) 772-4014, jhebelka@pa.gov

Notes:

Tool 23: Natural Areas Program

A program that encourages the restoration and protection of natural areas such as wetlands, forests, and native meadows on private property.



Tier One	Tier Two	Tier Three
<p>Create a program guidance that establishes natural area qualifications and clarifies ordinance revisions necessary to allow native plant growth in residential areas.</p>	<p>Form a committee to review applications and designate natural areas. Approve changes to necessary ordinances.</p>	<p>Promote the program and encourage participation by residents. Encourage other municipalities to start their own Natural Areas Program.</p>

RESOURCES

[South Londonderry Township Natural Areas Program](http://bit.ly/133MPhv) (http://bit.ly/133MPhv)

[Penn State Extension Forest Stewardship Program](http://extension.psu.edu/natural-resources/forests/private/stewardship/forest-stewardship-program) (http://extension.psu.edu/natural-resources/forests/private/stewardship/forest-stewardship-program)

PARTNERS

South Londonderry Township

Conewago Creek Initiative

Penn State Extension

CONTACT

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Notes:



Conservation Toolbox for Municipalities

A guide to local land and water conservation efforts.

Conewago Creek Initiative

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