### YORK COUNTY ACT 220 ISSUES RESPONSE

1. Please provide an overview of your county including the status of your Comprehensive Plan and how it addresses water resources.

York County is experiencing intense growth and development pressure. The York County Planning Commission (YCPC) is actively encouraging joint municipal planning, Environmental Advisory Council (EAC) formation, Source Water Protection planning, stormwater management planning, and growth management planning. In October 2003, the York County Water Resources Plan was adopted into the York County Comprehensive Plan. This component of the County Comprehensive Plan develops a long range watershed resources planning document that will be used by the entities who share watershed boundaries within and around York County. The Plan includes identifying the watershed resources of York County, addressing water use, quality, quantity, and pollution issues, as well as promoting the protection and conservation of watershed resources through the use of sound land use management practices. It is the goal of this Plan to provide necessary water management information to municipal and county planners, agencies, organizations and York County citizens for the future development and protection of its water resources.

# 2. What other county, subcounty or watershed level water resources plans or studies (by name) are currently underway or completed in the last five years for your county?

Upper Codorus Creek Watershed Conservation Plan; USACE Interim Environmental Restoration Report for Codorus Creek Watershed; USACE Codorus Creek Watershed Study; West Branch-Mainstem Codorus Creek Watershed Assessment Report; Codorus Creek Rivers Conservation Plan(RCP); South Branch Codorus Act 167 Plan update; Main & East Branch Codorus Act 167 Phase II; East and South Branch Codorus Creek Assessment Report; Codorus Creek Implementation Plan; Shrewsbury Wellhead Protection Plan; Oil Creek TMDL Report; South Branch Codorus TMDL Report; Pinchot Lake TMDL Report; Yellow Breeches RCP; Red Lion Source Water Protection Plan; Conewago Creek RCP; Little Conewago Creek Act 167 Phase I; Hanover Water Resources Plan; Northern York Region Water Resources Protection Plan; MS4 stormwater permit requirements; CRWB Lower Susquehanna Comprehensive Watershed Management Study

## 3. What is the status of stormwater management plans (Act 167) for watersheds in your county?

Kreutz Creek completed; South Branch Codorus Creek update complete waiting adoption; East and Main Branch Codorus Creek Phase II in progress; Little Conewago Creek Phase I complete-PhaseII waiting funding

### 4. What are the critical water resources issues in your county?

Groundwater nitrate levels; Stormwater runoff management; Sound land use management

### 5. What technical reports or model ordinances has the county developed that address local water resources issues?

York County Water Supply Plan; York County Wellhead Protection Plan; York County Water Resources Plan (component of County Comp Plan); Act 167 SWM model ordinances

# 6. What needs and priorities are identified in county/municipal/multi-municipal comprehensive plans and ordinances that are related to water resources?

Environmental Resource Protection; Riparian Buffers; Stormwater Management; Open Space protection; 100 year floodplains; steep slopes (>25%); Wellhead Protection; Source Water Protection; growth management

## 7. Would you recommend any changes to the regional priorities to adequately address the county/local needs and priorities?

Add an additional priority to provide a mechanism by which all regional, county, and local restoration/planning/assessment efforts could be coordinated. Perhaps a group of representatives meeting annually to update the State Committee, SRBC, Counties, Municipalities on efforts such as the ones requested in question 2 above. Most of the projects mentioned for York County were at least in part funded by DEP and/or DCNR. It seems that prudent planning would depend upon a more holistic awareness of all efforts being undertaken throughout the basin. The YCPC is developing GIS coverage of all restoration/planning/assessment/ open space protection/ CREP projects completed, in progress, or planned for the entire County. This would be an easy way to update the partners throughout the watershed on County efforts.

1. Please provide an overview of your county, including the status of your Comprehensive Plan and how it addresses water resources.

Union County is a relatively small county (317 square miles) bounded on the east by the West Branch of the Susquehanna River. Major waterways in the county other than the river include Penns Creek, Buffalo Creek, White Deer Creek and White Deer Hole Creek. The county population as of the 2000 US Census was 41, 264 which is projected to increase to 52, 165 by 2030. A large percentage of the county land use is agriculture that is now being converted to residential and commercial land uses. Manufacturing sectors of the local economy have been on the decline while the service and professional sectors have added new jobs. The major non-farm employers are Bucknell University, Playworld, Inc., United States Federal Bureau of Prisons, Evangelical Community Hospital, Yorketown, Inc., and the two local school districts.

The county comprehensive plan was adopted in 1996/1997 and is in need of being updated. The county plan, much like municipal comprehensive plans, addresses water resource issues in very general terms. Most municipal plans, with the exception of two of the fourteen municipalities, are well over 10 years old. In the past a considerable amount of effort has not been placed on the water resources component of the comprehensive plans because counties and municipalities are limited in what they can do. The PA DEP and the Susquehanna River Basin Commission have authority over water usage, withdraws, groundwater and permits, which combined with antiquated water rights laws, makes local elected officials feel they have little if any control over water resource issues.

2. What other county, subcounty, or watershed level water resources plans or studies are currently underway or completed in the last five years for your county?

None other than three Act 167 Plans.

3. What is the status of stormwater management plans (Act 167) for watersheds in your county?

The county has completed and the PA DEP has approved stormwater management plans for the following watersheds: Buffalo Creek, Bull/Limestone Run, West Branch Susquehanna, and White Deer Creek. The county also participated in and adopted the Cedar Run/Fishing Creek Act 167 Plan that covers a very small portion of the northwestern part of the county. The remaining watersheds without an Act 167 Plan are Penns Creek and White Deer Hole Creek, both of which have major portions of the watershed areas in other counties and Union County is not poised to be the lead county on such projects but would be a partner.

4. What are the critical water resources issues in your county?

The main issues are surface water quality (non-point source pollution from farms and urbanization), storwater management (Like most places it is feast or famine. Either there is too much precipitation and damaging floods occur or there is not enough during dry periods.), groundwater contamination (farms, urban areas, industry, septic systems), groundwater recharge, meeting the water supply demands of new development plus the demands of subsequent wastewater treatment.

5. What technical reports or model ordinances has the county developed that address local water resources issues?

In 1996-1998 the county developed, with the assistance of a consultant team, a water supply plan and wellhead and aquifer protection plan that included model water supply and wellhead and aquifer protection ordinances. Unfortunately no municipalities adopted the ordinances. Municipal officials did not agree with restricting individual property rights in order to protect the water supply. Part of the challenge is that two municipalities utilize wells for their water sources but the wellhead protection areas are in other municipalities. There were and are no incentives for municipalities to work together and the fragmentation of local government partially resulted in the program failure. Had the well owners had land use jurisdiction in the wellhead protection areas zoning would have been implemented to protect the wells, but unfortunately that was not the case. The aquifer protection ordinance was designed to protect a large carbonate aquifer that is believed to underly the central portion of the county that runs in an east west manner between approximately Hartleton Borough to the

Lewisburg area. The results were the same--it was not adopted. This is one of the prime development areas along the PA Route 45 corridor. In addition the county has provided model stormwater management ordinances under Act167 with the most recent update of those ordinances occurring in 2004.

6. What needs and priorities are indentified in county/municipal/multi-municipal comprehensive plans and ordinances that are related to water resources?

Most municipal comprehensive plans in the county only address water resources in terms of wastewater treatment. Only two municipalties have water systems (eastern part of the county is served by PA American Water Co.) which are only briefly mentioned in the plans. The county comprehensive plan and a few of the municipal plans stress the need for protection of floodplains, wetlands and other recharge areas, the need for stream buffers, better stormwater management, public education, improved treatment of sewage effluent, problems associated with failing on-lot septic systems, etc..

7. Would you recommend any changes to the regional priorities to adequately address the county/local needs priorities?

I believe some of the existing laws need updated or modified to provide for a more regional and less fragmented water resources management approach but also some of the existing laws need improved enforcement. For example counties are required to develop Act 167 plans and model ordinances but the implementation of such plans and ordinances rests with local municipalities for the most part where local zoning and development controls are in place. We still have municipalities in our county that have not implemented the ordinance requirements of Act 167 plans that were prepared and adopted by the County and PA DEP back in 1998. The PA DEP sends letters to the municipalities and that is all. Meanwhile development continues to occur in these watersheds adding to flooding, non-point source pollution, and reduced groundwater recharge. This is a problem and the PA DEP will not enforce the requirements of the existing Act but yet PA DEP and other state agencies will continue to provide grant monies to these municipalities for other projects.

Also there should be training/education for county and municipal officials added to the priorities which is different than public education and involvement. Local decision makers need to be made aware of water resources and planning issues and what tools they have available. A checklist or set of recommended guidelines for what to include in a comprehensive plan water resources chapter would be helpful to counties and municipalities. Recently the PA Historic and Museum Commission with the assistance of planners and others developed similar guidance for historic resource planning and protection sections of comprehensive plans.

Public education is important in many respects and should be a major priority category on its own rather than only being tucked away under the Regional Planning and Land Use heading.

Thank you,

Shawn McLaughlin

Shawn McLaughlin, AlCP, CPRP Planning Director Union County Planning Department 1610 Industrial Blvd., Suite 600 Lewisburg, PA 17837 570-522-1370 570-522-1389 Fax

### WATER RESOURCES LEBANON COUNTY, PA AUGUST 2005

### I. OVERVIEW OF LEBANON COUNTY -

Lebanon County is a 5<sup>th</sup> class county with an area of 362.9 square miles located in south central Pennsylvania. It is comprised of 26 municipalities – 16 second class townships, 2 first class townships, 7 boroughs and 1 third class city. Geographically it lies in the Great Valley at the southern edge of the Ridge and Valley province. The Blue Mountains form the northern border of the county, while the South Mountains lie along its southern boundary and the Lebanon Valley, with its rich limestone soil, lies between. It is bounded by Dauphin County to the west, Schuylkill to the north, Berks to the east and Lancaster County to the south. The majority of the county lies in the Susquehanna River Basin excepting the southeastern comer, which flows into the Delaware River.

From the time of its formation in 1813, Lebanon County's economy has been tied to its fertile soils. The farming industry, which includes swine, dairy and poultry operations, continues to contribute \$212,563,580 in sales and \$86.4 million in wages to the county's economy; however, only 1.1% of county residents list farming, fishing or forestry as their occupation. Today, the county's diverse economy includes workers employed in manufacturing (17%), retail trade (14%), miscellaneous services (15%), government (13%), and health care/social assistance positions (12%). The current unemployment rate is 4%.

The City of Lebanon is the county seat and is the core of the county's urbanized area as defined by the 2000 Census. The county's population in 2000 was 120,327, a 5.8% increase from 1990, and an increase of 30,963 people and 20,875 housing units since 1960. The county, in general, has experienced steady residential growth; however, western portions of the county have seen this growth accelerated (in excess of 20%) due to influences from the Hershey/Harrisburg area. As such, the county has become a bedroom community for surrounding areas where 32% of the county's population commute to work outside of the county.

Major transportation routes servicing the county and connecting it to the region include I-78 & I-81 in northern Lebanon County and I-76 (Pa. Turnpike) to the south. Additionally, U.S. Routes 322, 422 and 22 provide east-west access while PA Routes 72, 501, 934 and 343, provide north-south access. As a newly designated urban area, the county's transportation planning is now handled through the Lebanon County Metropolitan Planning Organization (LEBCO MPO), which is in the process of preparing its first Long Range Transportation Plan, due for completion by June 2006.

### II. LEBANON COUNTY PLANNING DEPARTMENT (LCPD) -

Created in 1969, LCPD is a department rather than a Planning Commission and reports directly to the County Commissioners. In addition to general community planning activities, the Planning Department provides technical assistance to local municipalities

preparing and updating land use plans and ordinances and assists the County Commissioners, as needed, on a wide variety of other county planning projects. Furthermore, the LCPD functions as the lead staff agency for the LEBCO MPO and provides planning and administrative support services for the MPO's transportation planning activities. The department also serves as a repository for county, municipal and demographic information, including the latest U. S. Bureau of Census population figures. Realizing the importance of technology in planning, LCPD has been actively involved in the development of the Lebanon City/County GIS, which is expected to be operational in late 2005.

As a review and/or enforcement agency for local municipalities, the LCPD either monitors activities on or develops and administers regulations dealing with zoning, land use and environmental issues within Lebanon County. Additionally, the LCPD enforces the *Lebanon County Subdivision and Land Development Ordinance*, which contains stormwater standards for most of the municipalities in Lebanon County. Furthermore, as a part of the 1972 Federal Clean Water Act, the department provides technical assistance to the county and local municipalities required to implement the MS4 Program.

Since 1975, LCPD has enforced the Pennsylvania Sewage Facilities Act of 1965 for most municipalities in Lebanon County (23 of 26) using state licensed sewage enforcement professionals. This includes permitting and inspection of on-lot sewage disposal systems. The program's excellent reputation has been recognized numerous times, culminating in the department's appointment by D.E.P. in 2001 as a Delegated Local Agency, with authorization for planning module administration. Additionally, in 2005, LCPD implemented a pilot Sewage Management Program, which assists property owners in the proper maintenance of on-lot sewage systems.

The department also acts as the Zoning Enforcement Agent for 17 local municipalities. This service has been provided since 1971 and includes permit issuance for all new construction, monitoring flood plain management activities, investigating violations, and administering zoning hearing board actions. A summary of the activity level in 2004 indicated 1,508 permits issued for a total of \$87.7 million of construction — approximately 50% of the total county construction activity.

Finally, in 1991 LCPD was asked by municipalities to expand its inter-municipal services program to include a building code component. State-certified Code Officers now enforce the new statewide Uniform Construction Code for 17 municipalities in the county. In 2004, over 700 building code permits were issued.

### The 19 member staff of the LCPD includes:

Executive Director
Assistant Director
Senior Planner
Subdivision Planner
Transportation Planner
Transportation Consultant
GIS Technician
2-Secretaries

Zoning Administrator
2-Zoning Officers
Building Code Official
3-Building Code Officers
Sewage Administrator
Sewage Module Review Specialist
Sewage Management Program Coordinator

### III. COMPREHENSIVE PLAN PROJECT -

In early 2005, the LCPD embarked upon a 2-½ year comprehensive planning project for the county. The \$603,445 project is being jointly funded by the County of Lebanon, DCED, DCNR, PennDOT and DEP, with approximately \$425,000 coming from the state agencies. A professional planning team (Gannett Fleming, RETTEW Assoc., Toole Recreation Planning & Yost Strodoski Mears) is assisting the Planning Department in the preparation of this countywide planning document.

Emphasis has been placed on conducting inventories and collecting data for the county's GIS. This will allow for improved coordination of planning efforts, provide up-to-date data for future planning activities, and improve the county's position to obtain and utilize future funding opportunities. Key issues in the plan include the coordination of transportation and land use, analysis of housing and community facilities/utilities, economic development strategies, natural resource conservation and preservation, as well as the development of sound and workable goals and objectives with a concise work program and clearly defined implementation responsibilities. One aspect of implementation is expected to include the coordinated review of local regulations for compliance with the goals and objectives of the comprehensive plan.

As indicated in the Scope of Work for the Comprehensive Plan, doing an inventory of the county's natural resources and environmentally sensitive land and analyzing the environmental impact development might have on these resources, will better equip the county, local municipalities and citizen groups to prepare coordinated short and long term strategies to more effectively preserve and protect these resources. An inventory of the county's natural resources and greenways will identify areas where historic, recreational and conservation areas can be connected thereby providing improved access to and better use of such facilities by the general public. Many of these potential connections already exist (e.g. Appalachian Trail, Horseshoe Trail, Swatara State Park, Lebanon Valley Rail Trail, etc.) or lie along existing flood plains. To accomplish this, the project planning team will meet with watershed and conservation groups, local officials and state agencies to obtain up-to-date information. Additionally, an educational component has been incorporated into the planning process to better inform the entire community, from municipal officials to local property owners, as to the intricacies, realities, and importance of community planning in the 21<sup>st</sup> century.

A Natural Diversity Inventory for Lebanon County was completed in 2003 by the Nature Conservancy and will provide even more critical data to define environmentally sensitive areas. Additionally, Lebanon County is participating in the Kittatinny Ridge Project which is a collaborative effort of local, regional and state organizations and agencies to develop a long-term vision for the Ridge as a significant existing greenway and to assist local governments, civic groups, etc. to implement the vision at a local level.

### IV. PUBLIC WATER SOURCES -

Public water is provided to the residents of Lebanon County through a variety of sources, the largest being the City of Lebanon Authority. The City's water supply is surface water

from the Christian E. Siegrist Reservoir (storage capacity – 1.2 billion gallons) or from the Swatara Creek. According to its 2004 annual report, the Lebanon water system services about 57,000 people through over 15,100 residential service connections in the City and 15 municipalities in the county. Water is also provided to commercial, industrial, institutional, and bulk customers, including Cornwall Borough, the Village of Fredericksburg, W. Lebanon Township, Indiantown Gap Military Reservation and PA American Water.

Currently, the city utilizes 7 million gallons/day from Siegrist Reservoir and 1 million gallons/day from the Swatara Creek. This raw water is pumped to the water treatment plant, which is rated to handle up to 10 million gallons/day. Over the past 3-4 years a ½ to ½ million gallon/day annual increase has been noted indicating that the city's facilities will reach capacity by 2010. Advancement of the development of Swatara State Park, including the associated dam to augment water availability, is a critical need. Other water service providers include PA American and municipal authorities in Myerstown Borough, Richland Borough, Heidelberg Township and Newmanstown.

According to the Susquehanna River Basin Commission's *Ground Water Management Plan*, the Fredericksburg area is listed as a "potentially stressed area" due to the rapid commercial, industrial and residential development occurring in the area. Additionally the Hershey area (Spring Creek Basin) adjoining Lebanon County to the west, is also experiencing considerable growth and is also classified as a "potentially stressed area". Finally, the diabase soils of the South Mountain provide low water yields. It is expected that the State Water Plan will consider these areas as candidates for a Critical Water Planning Area designation.

### V. WATER RESOURCES -

Lebanon County has eight (8) principal watersheds – Cocalico Creek, Conewago Creek, Donegal/L. Chiques Creek, Quittapahilla Creek, Spring Creek, Stony Creek, Swatara Creek and Tulpehocken Creek. While many of these watersheds have had studies completed, there is no consistency regarding the order of assessments, restoration and/or protection studies. (See attached list.) One of the goals of the current comprehensive planning process is to inventory and develop an action plan for future studies within the county. While Lebanon County has had stormwater management regulations since 1983, only two (2) Act 167 Stormwater Plans have been completed for watersheds in Lebanon County – Cocalico Creek and Tulpehocken Creek. In addition to the seventeen (17) municipalities that fall under the *Lebanon County Subdivision and Land Development Ordinance*, the remaining municipalities either have used the county's ordinance as a model for their own requirements or have adopted some other form of subdivision regulation that includes stormwater management. Consequently, stormwater runoff is regulated throughout the county and currently contains groundwater recharge, infiltration and BMP provisions.

The county has 528.6 stream miles. According to the 2*004 Pennsylvania Integrated Water Quality Monitoring and Assessment Report* (DEP), 288.33 stream miles in Lebanon County are impaired by sediment and nutrient pollution – 233.08 miles or 81%

by agricultural sources and 55.25 miles from non-agricultural sources. (Although construction related activities contribute to the production of sediment laden runoff, their contribution is minimal and of relatively short duration.) An analysis of agricultural activities within the county indicate several key trends contributing to this situation: erosive cropping systems which have become the norm throughout the county, significant growth of hog and poultry operations, and the increasing challenge for the distribution and agronomic application of manure. Over the past 15 years, Lebanon County's agricultural industry has grown and intensified while other counties have experienced decreased production.

Critical water resource issues as identified by Lebanon County's Chesapeake Bay Tributary Strategy include:

- County ranking below the state average for implementation of Conservation Tillage Practices, in part due to a lack of understanding of the practices
- Erosion over winter months due to a lack of cover crops, which would also increase the uptake of excess nutrients
- Large number of farms with outdated or non-existent conservation plans
- Large number of farms without Nutrient Management Plans or a lack of implementation on those farms that do have them
- Livestock operations without proper manure management or handling
- Improper handling, storage and disposal of animal carcasses leading to nutrient and pathogen contamination of ground and surface waters
- Stream bank erosion due to unlimited cattle access
- Lack of functional grassed and forest buffers which reduce sediment and nutrient pollution to waterways - in both rural and urban areas

In addition to those listed above, the following priorities are presented for Lebanon County's water resources by the Lebanon County Conservation District:

- Need for on-going, comprehensive education of the general public about pollution of water resources from over fertilizing lawns, littering, improper use of storm sewers, etc.
- o Provide additional funding and resources to provide education and to implement corrective measures
- Evaluate and determine a strategy for dealing with increasing amounts of horse manure and human waste at Penn National Race Track.
- Review local zoning ordinances for appropriate permitting criteria for commercial water bottling enterprises
- Determination of water uses requiring statewide priority during times of crisis
- Encourage "soil building" with organic matter to improve water holding capacity
- Evaluate storage impacts of legacy sediments behind dams; develop sediment removal strategy
- Encourage riparian restoration of flood plains, including acquisition, if necessary, to remove inappropriate uses
- Require on-site septic system checks and maintenance regulations

- Evaluate air pollution impacts on water quality
- Evaluate/encourage on-site storage in cisterns for times of low supply
- Implement graduated fees/taxes for large water users in times of drought as well as penalties for larger water polluting operations as well as incentives for improvement

# Watershed Studies and Plans (Updated 6/2/05)

WATERSHED	PUBLICATION	AUTHOR	STATIC	
Chiques & East	WRAS-Watershed Restoration Action	94 000		CONTACT INFO
Conewago Creek	Strategy, 2001	Ĭ,	complete	PA DEP or LCCD
Chiques Creek	Chiques Creek Watershed Assessment	Land Studies	Complete	(CON A Name of LCCD)
				717-665-3827
Conestoga River	WRAS-Watershed Restoration Action	PA DEP	Complete	PA DEP or LCCD
	Sirategykuui			(Copy available at LCCD)
Conewago	Conewago Creek Watershed Non-Point Source Pollution Assessment, January 1988	Dauphin, Lancaster, and Lebanon County Conservation Districts	Complete	(Copy available at LCCD)
Conewago	Watershed Assessment	Rettew Associates & Tri-County	80%	TCCCA, Matt Royer,
		Conewago Creek Watershed	Complete	(717) 214-7928
		Association		Rettew Associates, Mark Metzler, mam1@rettew.com
Conewago	A baseline Water Quality Assessment of	Lebanon Sr. High School.	Complete	TA Dalah Taistan
•	Conewago Watershed	Honors Biology Students,	_	717-273-9391
		Fall 2002-2003		1
Furnace Run	A baseline Water Quality Assessment of	Lebanon Sr. High School,	Complete	LHS. Ralph Heister
	The Furnace Run Watershed	Honors Biology Students		717-273-9391
	רמוו בטטו-בטטב			(Copy available at LCCD)
rurnace kun		Conestoga Valley High School	Complete	CVHS, Kerrie Snavely
				717-397-5237
Septoch Dun	Coldwater Conservation Plan	FR/SR Watershed Alliance &	Complete	FR/SR WA, Dave Wise
	10003	Rettew Associates		DWise@savethebay.cbf.org
				RA, Mark Metzler
				mam1@rettew.com
				(Copy available at LCCD)
Tommer	Howmon County of Land	4.74%		
	Watershed Assessment	FX Browne	Complete	FX Browne, Rebecca Burkette 518-891-1410
				FX Browne, 570-588-7900
				(Copy available at LCCD)

						7			
Heidelberg 1wp, /1/-949-3885 SSM, 610-621-2000 (Copy available at LCCD)	QWA, Dave Lasky, 717-867-4837 CCC, Rocky Powel, 410-692-2164	Trout Unlimited-Doc Fritchey Chapter, Frank Viozzi 717-566-7920	LHS, Ralph Heister 717-273-9391 (Copy available at LCCD)	(Copy available at the LCCD)	SCWA, Jo Ellen Litz 717-274-1175 (Information available at www.mbcomp.com/swatara)	PA DEP or LCCD (Capy available at LCCD)	LCCD, 717-272-3908 ext.4 (Copy available at LCCD)	PA DEP or LCCD (Copy available at LCCD)	LVC, Tisha Walmer, 949-3210 URDC, Steve Szigethy 610-865-0701
Complete	In Progress (80% complete)	In Progress	Complete	Complete	Complete	Complete	Complete	Complete	In progress
Spotts, Stevens, & McCoy, Inc.	Clear Creek Consulting, QWA, Et al	Trout Unlimited-Doc Fritchey Chapter & URS Corporation	Lebanon Sr. High School Honors Biology Class	rccp	Mackin Engineering & SCWA	PA DEP	USDA-NRCS Forest Service, Berks and Lebanon Conservation Districts, & Berks County Conservancy	PA DEP	Lebanon Valley Conservancy & URDC
Heidelberg Township Wellhead Protection Program and Management Plan, May 2004	Watershed Assessment (preliminary findings report available at LCCD)	Watershed Assessment	Effects of Acid Mine Drainage on Upper Stony Creek Watershed 1999-2000	Assessment of Non-Point Source Pollution in the Swatara Creek Watershed, December 1988	Rivers Conservation Plan September 2000	WRAS-Watershed Restoration Action Strategy, 2001	Tulpehocken Creek Watershed Protection Plan and Environmental Assessment, November 1997	WRAS-Watershed Restoration Action Strategy	Greenway Feasibility Study
Hammer, Middle, Tulpehocken, å Mill Creeks	Quittapahilla	Stony Creek	Stony Creek	Swatara	Swatara	Swatara	Tulpehocken	Tulpehocken	Tulpehocken

For more information contact: Stephanie Harmon, Watershed Specialist stephanie.harmon@pa.nacdnet.net

Lebanon County Conservation District 2120 Cornwall Rd \* Suite 5 Lebanon, PA 17042 - 717-272-3908 ext. 4

#### Pennsylvania State Water Plan

## Lower Susquehanna Regional Water Resource Committee (Meeting of August 15, 2005)

### Blair County (Altoona MSA)

1. Please provide an overview of your county including the status of your comprehensive plan and how it addresses water resources.

Blair County is a single county metropolitan area with a population of 129,144 (2000). Along with county government, it includes one (1) city, eight (8) boroughs and fifteen (15) townships. It is located at the headwaters of the Juniata River.

The initial plan, An Areawide Comprehensive Plan for Blair County (Altoona MSA), was adopted in 1972 and included a water and sewer plan as a functional element.

The Blair County Planning Commission is drafting an updated countywide (metropolitan areawide) comprehensive plan with completion expected during December 2005. We are also preparing a greenways plan as a more focused functional element of the comprehensive plan with completion expected during June 2006.

Within limits of funds available, we address water supply and distribution in the preparation of the updated comprehensive plan.

Strategically, we view the preparation of a countywide comprehensive plan as the first of two (2) steps in effectively planning for our area. For the second step, we encourage and will assist groups of municipalities, organized within seven (7) regions (school districts), to prepare larger scale and more detailed municipal comprehensive plans.

With completion of the State Water Plan (and assuming adequate funding), we intend to prepare a functional element of the countywide comprehensive plan which will include a plan for the reliable supply of water. In preparing this plan, we will consider the availability of current and future water resources, uses and limitations including provisions adequate to protect water supply sources. We also intend to prepare this functional element consistent with the State Water Plan and any applicable water resources plan adopted by the Susquehanna River Basin Commission.

We further intend to encourage and assist the municipalities to incorporate provisions of the water supply plan (with the advantage of working at larger scale and greater detail) in their municipal comprehensive plans.

- 2. What other county, subcounty or watershed level water resources plans or studies (by name) is currently underway or completed in the last five years for your county?
- Juniata River Basin Pennsylvania Reconnaissance Study, US Army Corps of Engineers, Baltimore District (September 1995)
- Juniata Watershed Management Plan and GIS Projects, Juniata Clean Water Partnership (March 2001)
- The Sinking Run Watershed Stewardship Plan, Center for Watershed Stewardship, Keystone Project (Spring 2003)

- Source Water Protection Program: Watershed Protection Plan, Altoona City Authority and Gwin, Dobson and Foreman, Inc. (2004)
- Strategic Area Management Plan for Water Resources along the I-99 Corridor, Northern Blair County, The EADS Group (September 2004)
- 3. What is the status of storm water management plans (Act 167 of 1978) for watersheds in your county?
- Beaverdam Branch Watershed [of the Frankstown Branch of the Juniata River] Approved by the Department of Environmental Protection (DEP) in May 2000. Being updated by the Blair County Planning Commission, on behalf of the Counties of Blair and Cambria, to minimize increases in runoff volume, maintain groundwater recharge, protect water quality in addition to control of peak discharge rate. The update of the plan also serves as a means for municipalities, designated by the Environmental Protection Agency (EPA) as having municipal separate storm sewer systems (MS4's), to implement six (6) minimum control measures (MCM's) through the preparation of a watershed based storm water management plan.
- Bobs and Dunning Creeks Watershed [of the Raystown Branch of the Juniata River] Approved by DEP in March 2005. Prepared by the Bedford County Planning Commission, on behalf of the Counties of Bedford, Blair and Cambria.
- Little Juniata Branch Watershed [of the Juniata River] Being prepared by the Blair County Planning Commission, on behalf of the Counties of Blair, Cambria and Huntingdon, to minimize increases in runoff volume, maintain groundwater recharge, protect water quality in addition to control of peak discharge rate. The plan also serves as a means for municipalities, designated by the EPA as having MS4's, to implement six (6) MCM's through the preparation of a watershed based storm water management plan.
- Frankstown Branch Watershed [of the Juniata River]- Next highest priority for preparation by the Blair County Planning Commission.
- South Bald Eagle Creek Watershed [of the Little Juniata Branch of the Juniata River] Next highest priority for preparation by the Blair County Planning Commission.
- 4. What are the critical water resources issues in your county?
- Protecting watersheds of reservoirs used for water supply
- Age and condition of water distribution systems in the city and boroughs
- Identification of the Roaring Spring Borough area in the Susquehanna River Basin Commission's Groundwater Management Plan (June 2005) as a potentially stressed area
- High level of nitrates in groundwater withdrawn from municipal well fields near Martinsburg Borough
- 5. What technical reports or model ordinances has the county developed that address local water resources issues?
- Model ordinances to implement provisions of the Watershed Storm Water Management Plan for the Beaverdam Branch
- Model storm water management ordinance provisions that address construction phase storm water management controls, post-construction storm water management controls, and prohibited discharges to the municipality's storm sewer system.

- 6. What needs and priorities are identified in county/municipal/multi-municipal comprehensive plans and ordinances that are related to water resources?
- Protection and preservation of watersheds of reservoirs used for water supply as part of proposed system of greenways
- Proposed areas for water service consistent with the land use element of the countywide comprehensive plan
- 7. Would you recommend any changes to the regional priorities to adequately address the county/local needs and priorities?

We are unable to assess the impact of the proposed regional priorities upon countywide and municipal comprehensive planning at this time.

### HUNTINGDON COUNTY WATER RESOURCES ISSUES AND PLANNING August 15, 2005

## 1. Please provide an overview of your county including the status of your Comprehensive Plan and how it addresses water resources.

Huntingdon County is centrally located in Pennsylvania, just south of State College. The population according to the 2000 US Census was 45,586. The county can best be characterized as rural with small centers of development. The local economy is dominated by agriculture, two state correctional facilities, several manufacturing facilities, and Juniata College. The Juniata River, including the Raystown Lake, is the largest waterway in the County.

Huntingdon County's Comprehensive Plan, entitled Continuity Through Conservation II was adopted in July of 2000. Surface and groundwater issues are included in the Natural Resources and Conservation Plan.

# 2. What other county or watershed level water resources plans or studies are currently underway or completed in the last five years?

The Juniata Watershed Management Plan was completed in 2000. The Shoups Run Watershed Analysis was completed @ 2001.

## 3. What is the status of stormwater management plans (Act 167) for watersheds in your county?

The Comprehensive Plan identifies development of Stormwater Management Plans for the County's 19 drainage areas as a key activity. Plans are complete for the Muddy Run Watershed located in Huntingdon Borough, the county's most populated municipality.

A stormwater management plan was completed in 2004 as an element of well head protection for the Mount Union Area water supply. This plan addresses runoff from those private properties located within the well head protection area.

### 4. What are the critical water resources issues in your county?

In addition to those items mentioned under question #6 the following items are important to note.

Management capacity of small water systems is a concern. Many water authority workers are older and are not certified operators. There is a lack of professional full-time system operators. This is largely due to the high cost associated with small systems paying salaries to support the certified operator. Frequently, there are too few customers to affordably finance a full time operator and insufficient coordination between neighboring systems to share operators.

Management of on lot septic systems is critically needed to prevent both surface and groundwater pollution.

## 5. What technical reports or model ordinances has the county developed that address the county/local needs and priorities?

Huntingdon County has developed a model subdivision ordinance for adoption by townships and boroughs which addresses water resources in general terms.

## 6. What needs and priorities are identified in comprehensive plans and ordinances that are related to water resources?

With 46% of land in Huntingdon County identified as either steep slopes or floodplain, enforcement of existing ordinances to limit development in these areas is critical.

The possibility for water pollution from new agricultural practices such as concentrated feeding operations is noted as a concern due to the lack of local controls.

Ridge top development is identified as a concern due to the lack of recharge and limited groundwater supply. The County's Comprehensive Plan recommends an analysis of the the water supply as a tool to limit development based on quantity of water available

Groundwater in Huntingdon County is vulnerable due to carbonate geology.

Illegal dumping is identified as a contributor to water pollution.

## 7. Would you recommend any changes to the regional priorities to adequately address the local needs and priorities?

It is suggested that assessment of the capacity for hydro powered energy generation facilities be added as an important element in the water resources plan