Petition to Upgrade the Upper Perkiomen Watershed

December 8, 2006

Submitted by Delaware Riverkeeper Network
in partnership with Perkiomen Valley Trout Unlimited,
Lehigh County Conservation District, Perkiomen Watershed Conservancy,
and Montgomery County Conservation District

KAREN D. BEYER, MEMBER
131ST LEGISLATIVE DISTRICT

ROOM G-32 IRVIS OFFICE BUILDING
HOUSE BOX 202020
HARRISBURG, PENNSYLVANIA 17120-2020
PHONE: (717) 783-1673
FAX: (717) 787-9463

DISTRICT OFFICE
2851 SOUTH PIKE AVENUE, SUITE C
ALLENTOWN, PENNSYLVANIA 18103
PHONE: (610) 791-6270
FAX: (610) 791-6274

E-MAIL: kbeyer@pahousegop.com
WEBSITE: www.repbeyer.com

HOUSE OF REPRESENTATIVES
COMMONWEALTH OF PENNSYLVANIA
HARRISBURG

COMMITTEES:

EDUCATION
GAME & FISHERIES
MAJORITY POLICY
URBAN AFFAIRS
VETERANS AFFAIRS & EMERGENCY PREPARDNESS

December 20, 2006

Honorable Kathleen McGinty, Chairperson
Environmental Quality Board
Rachel Carson State Office Building
15th Floor, PO Box 2063
400 Market St.
Harrisburg, PA 17105-2063

Memorandum

Dear Chairperson McGinty:

Please except this petition submitted to my office from the Delaware Riverkeeper Network, Perkiomen Valley Trout Unlimited, Lehigh County Conservation District, Montgomery County Conservation District, and the Perkiomen Watershed Conservancy for the upgrade of the Upper Perkiomen Creek.

It is my pleasure to submit this to the department on behalf of these entities and the residents of the 131st Legislative District.

If you have any questions or concerns, please contact my office at 610-791-6270.

Sincerely,

KAREN D. BEYER
State Representative
131st Legislative District

ENV. PROTECTION
SECRETARY'S OFFICE
06 DEC 22 AM 9:56
RECEIVED

KDB/bh

CC: Delaware Riverkeeper Network

DELAWARE RIVERKEEPER®

December 8, 2006

To: The Honorable Kathleen McGinty, Chairperson
Environmental Quality Board
Rachel Carson State Office Building
15th Floor, PO Box 2063
400 Market St.
Harrisburg, PA 17105-2063

From: 84 businesses and landowners serving as co-petitioners/supporters of the petition

Delaware Riverkeeper Network, Perkiomen Valley Trout Unlimited, Lehigh County Conservation District, Montgomery County Conservation District, and Perkiomen Watershed Conservancy are jointly submitting this petition for upgrade of the Upper Perkiomen Creek. For administrative purposes, any correspondence about this petition can be directed to the Delaware Riverkeeper Network. Contact information for the five lead petitioners is as follows:

Delaware Riverkeeper Network
Maya van Rossum, the Delaware Riverkeeper
300 Pond Street, 2nd Floor
Bristol, PA 19007
Tel: 215-369-1188 ext 102

Perkiomen Valley Trout Unlimited #332
Jack Steel, Vice President
P.O. Box 730
Green Lane, PA 18054

Lehigh County Conservation District
Harold Hoppes, District Chairman
Lehigh County Agricultural Center
Suite 102
4184 Dorney Park Road
Allentown, PA 18104-5728
Tel: 610-391-9583 ext. 18

Perkiomen Watershed Conservancy
Crystal Gilchrist, Executive Director
1 Skippack Pike
Schwenksville, PA 19473
Tel: 610-287-9383

Montgomery County Conservation District
Richard Kadwill, District Manager
143 Level Road
Collegeville, PA 19426-3313
Tel: 610-489-4506

In addition to these five co-petitioners, there are 79 organizations, landowners, businesses, and local governments who are serving equally as co-petitioners/supporters for this petition to the Environmental Quality Board. They include the following entities and Appendix A provides letters from each of these co-petitioners.

Landowners

Lance Tittle
Chuck, Teri and Wyatt Brumm
Thomas & Elizabeth Graber
Donald Moyer
George van Rossum (water quality monitor), East Greenville PA
Ruth & Martha Voorhees
Michael Kutz
Marguerite & Philip Fadil
Colleen Bechtel
Claire and Howard Shelly
Ed & Denise Lounsberry
Al Rood
Dave Worthington
Alton & Linda Wimmer
Laurence & Susan Karper
Linda & Dennis Weidemoyer
Winifred & Edward Jensen
Brian Barger
Justin T Smith
Holly Delaco-Smith
Karen Wright
Martha Cawley
Robert & Martha Holby
Randall Romig
Val Bertoia
Henry Stauffer, Palm PA
William Bander Sr., East Greenville PA
Terry Schmoyer, Palm PA
Mike Bradford, East Greenville PA
James Haines, East Greenville PA
Paul Shellaway, East Greenville PA
Stan Krazek, East Greenville PA
Russel Burd, East Greenville PA
Sharon Kachmar, East Greenville PA
John McDonnell, East Greenville PA
C. Vermmsch, East Greenville PA

Farmers

James Longacre – Longmeadow Farm
John Cox
Glenn Hoffman

Richard & Elizabeth Hate
Lawrence Kahler
Terry Ferrence
Richard & Merris Ann Hoffman

Organizations

Delaware Riverkeeper Network
Morris Arboretum of the University of Pennsylvania
Trout Unlimited, Perkiomen Valley Chapter #332
PA Council of Trout Unlimited
Perkiomen Watershed Conservancy
Upper Perkiomen Watershed Coalition
Clean Water Action
Lehigh Valley Group of the Sierra Club
Lehigh Valley Audubon Society
Green Valley Coalition
Ducks Unlimited
Pine Creek Valley Watershed Association
Stroud Water Research Center
Montgomery County Land Trust
League of Women Voters, Lehigh County
Wildlands Conservancy
The Lorax Foundation
Berks County Conservancy

Townships and Government

Representative Karen Beyer, 131st Legislative District
Hereford Township
Lehigh County Conservation District
Montgomery County Conservation District

Businesses

Securities America, Inc.
Fabricated Alloy Products, East Greenville
Wright Wine Works
Landhaven – Ed and Donna Proprietors
Bertoia Studios

As you can see by this list, the support for upgrade of the Upper Perkiomen is genuine, strong and diverse. Representative Karen Beyer of the 131st Legislative District also supports this petition on behalf of her constituents and has hand delivered this petition to the Department. We have every expectation that support for the upgrade will continue to grow and expand throughout the public petition process.

Upgrading the Upper Perkiomen was first discussed by Stroud Water Research Center, an entity that has collected water quality data throughout the Schuylkill River Watershed and

that indicated to Delaware Riverkeeper Network and Perkiomen Valley Trout Unlimited the exceptional benthic community present in areas sampled in the Upper Perkiomen.

Petitioners gathered additional information and data which demonstrated a need for the waterway to be more appropriately designated and the region better protected in order to meet present water quality conditions. The Upper Perkiomen serves as drinking water supply and drains into Green Lane Reservoir, Montgomery County. There have been various reports, white papers, and studies done on this region because of its importance. A Watershed Conservation Plan was completed for the region in 2003, placing the Upper Perkiomen Creek Watershed on the Pennsylvania Rivers Conservation Registry administered by the Department of Conservation and Natural Resources.

Since 2000, there has been a heavy investment by the Commonwealth using Growing Greener funding and from other funding programs to implement at least 24 restoration projects in the Upper Perkiomen. These projects were made possible by state funding but also because of the local groups that work every day in this region to better restore and protect the watershed and the creek. Many of the restoration projects are being maintained on a regular basis. Benthic data being collected in proximity to these restoration projects show cleaner streams post-restoration. DEP investments in restoration are restoring streams and have helped protect and enhance the Upper Perkiomen. Upgrading the status of the Upper Perkiomen to its proper designation is an important recognition of the value of the Upper Perkiomen, of the region, of the residents, the DEP and the Commonwealth who have worked so hard to protect it, and it is the logical next step in protecting the investments we have all made in this watershed.

Our attached petition documents the data, the reasons and the rationales that support our request to upgrade the Upper Perkiomen to EV status. We look forward to working through this petition process and do not hesitate to contact me with any questions or concerns at 215-369-1188 ext. 102.

Respectfully Submitted,

Maya van Rossum
Delaware Riverkeeper
Delaware Riverkeeper Network

0120-FM-PY0004 Rev. 3/2003

COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL QUALITY BOARD

PETITION FORM

I. PETITIONER INFORMATION

Name: Delaware Riverkeeper Network

Mailing Address: 300 Pond Street, 2nd floor

Bristol, PA 19007

Telephone Number: 215-369-1188 x. 110

Date: December 8, 2006

II. PETITION INFORMATION

A. The petitioner requests the Environmental Quality Board to (check one of the following):

☐ Adopt a regulation

☒ Amend a regulation (Citation 25 pa code § 93.9f - Upgrade of Upper Perkiomen watershed to Exceptional Value (EV) and Macoby Creek, to High Quality (HQ) including:

· The Hosensack Watershed including locally known tributaries of Indian Creek and Walters Creek and all of its unnamed tributaries are currently designated CWF as outlined in Chapter 93. Request for upgrade to EV.

· The Upper Main Branch of the Perkiomen Creek from its source near Seisholtsville to SR 1010 Bridge at Hereford is designated High Quality Cold Water Fishery (HQ-CWF). The Upper Main Branch, from SR 1010 Bridge to Green Lane Reservoir Dam is designated Trout Stocked Fishery (TSF). Request for upgrade to EV.

· Portions of the West Branch proposed for an upgrade are currently designated Cold Water Fishery (CWF). Specifically, West Branch Source to SR 1022 Bridge is CWF and SR 2069 Bridge to Mouth is CWF. Request for upgrade to EV.

· All of Macoby Creek is designated Trout Stocked Fishery (TSF). Request for upgrade to HQ.)

☐ Repeal a regulation (Citation _____)

Please attach suggested regulatory language if request is to adopt or amend a regulation.

B. Why is the petitioner requesting this action from the Board? (Describe problems encountered under current regulations and the changes being recommended to address the problems. State factual and legal contentions and include supporting documentation that establishes a clear justification for the requested action.)

(See attached Section B)

C. Describe the types of persons, businesses and organizations likely to be impacted by this proposal.

See Attached Section C

D. Does the action requested in the petition concern a matter currently in litigation? If yes, please explain.

No

E. For stream redesignation petitions, the following information must be included for the petition to be considered complete. Attach supporting material as necessary.

1. A clear delineation of the watershed or stream segment to be redesignated, both in narrative form and on a map.
2. The current designated use(s) of the watershed or segment.
3. The requested designated use(s) of the watershed or segment.
4. Available technical data on instream conditions for the following: water chemistry, the aquatic community (benthic macroinvertebrates and/or fishes), or instream habitat. If such data are not included, provide a description of the data sources investigated.
5. A description of existing and proposed point and nonpoint source discharges and their impact on water quality and/or the aquatic community. The names, locations, and permit numbers of point source discharges and a description of the types and locations of nonpoint source discharges should be listed.
6. Information regarding any of the qualifiers for designation as high quality waters (HQ) or exceptional value waters (EV) in §93.4b (relating to qualifying as High Quality or Exceptional Value waters) used as a basis for the requested designation.
7. A general description of land use and development patterns in the watershed. Examples include the amount or percentage of public lands (including ownership) and the amount or percentage of various land use types (such as residential, commercial, industrial, agricultural and the like).
8. The names of all municipalities through which the watershed or segment flows, including an official contact name and address.
9. Locational information relevant to items 4-8 (except for contact names and addresses) displayed on a map or maps, if possible.

All petitions should be submitted to the
Secretary of the Department of Environmental Protection
P.O. Box 2063
Harrisburg, PA 17105-2063

B1 Why is the petitioner requesting this action from the Board?

Problems Encountered Under Current Designation

The current designations of the Upper Perkiomen do not accurately depict the outstanding water quality of the Upper Perkiomen Watershed and greatly underestimates the natural resource values of this region. An upgrade to EV status for the Upper Perkiomen Watershed and HQ status for the Macoby Creek sub-watershed would offer greater protection from any future discharges that would adversely influence water quality and ensure the watershed's exceptional water quality is maintained and protected as outlined in the Chapter 93 anti-degradation regulations (25 Pa.Code § 93.4a(c)). There is also a problem with the fragmented nature of the West Branch Perkiomen Creek which currently has only a mid-section of the stream designated as EV with its headwaters and lower section designated CWF. In the PA DEP Stream Redesignation Evaluation Report Revised in July 2001, PA DEP states, "The [score of 80% of the reference station score] in the headwaters section [of the West Branch] is probably caused by degradation of the benthic habitat and lower gradient, not by poor water quality as evidenced by the significantly higher scores at the two stations farther downstream".

Threats to the Watershed

"Central and western Montgomery County experienced a 242 percent increase in developed acres between 1965 and 1990. Much more land is being used for each new house than in previous decades. In 1965 there were 0.8 acres of developed land per household. Between 1965 and 1990, land was developed at a rate of 1.4 acres per household.[i] The 2000 Census document that municipalities of the Upper Perkiomen Creek watershed have experienced slower growth (so far) than their surrounding municipalities over the last two decades. However, this area is projected to grow by 50% over the next fifteen years. The pattern and intensity of this land use that results from this growth will determine the future health and sustainability of the Upper Perkiomen. If the pattern is sprawling and converts open space areas into conventional suburban landscapes as seen surrounding the area, then stream quality will become drier and more degraded, just as it has in countless other "built-out" communities. In areas like the Hosensack watershed, where public sewer is not available, large-lot single-family subdivisions with onsite water and sewer facilities are a real threat. In addition, there are not sufficient riparian buffer ordinances within the watershed to protect the

remaining intact riparian buffers in the Upper Perkiomen Creek as this development threat is realized.

Changes being recommended to Address the Problems

EV/HQ designations will not stop new development but will provide better mechanisms to ensure the watershed is protected as changes take place. The most common ways EV and HQ status can change things include: 1) antidegradation review for proposed new discharges (such as expanding sewage facilities or stormwater discharges) and application of nondischarge alternatives for permits if possible, and 2) the need to apply for individual permits instead of general permits in many cases. Proposed developments must ensure that stormwater run-off during and after construction will not degrade water quality in the designated waterway. All earth disturbances, regardless of size, that may come to impact EV/HQ waterways must include an erosion and sedimentation plan and must implement "special protection" best management practices (BMPs) to minimize soil erosion and sedimentation to the receiving stream. Special Protection BMPs include:

- Special design requirements for sediment basins
- Lining all channels, collectors and diversions with permanent vegetation, rock, geotextile or other nonerosive materials
- Designing BMPs for peak discharge from 5-year frequency storm
- Immediate stabilization of the site upon completion or temporary cessation of earth disturbance
- Alternative BMPs to maintain and protect existing water quality if approved by DEP or County Conservation District.

As with construction activities, associated with development, logging operations in HQ and EV watersheds must implement the "Special Protection" BMPs that are not usually required in watersheds that are not HQ or EV. If a proposed development in the Upper Perkiomen involves disturbance or encroachment into wetlands, streams, or surface water within the floodplain of the EV stream, an Encroachment Permit is required. Ford crossings would also require an Encroachment Permit in EV streams and individual permits for utility line stream crossings, minor road crossings and temporary road crossings are required in EV streams.

Proposed new dams in EV watersheds require an environmental assessment review. Low level radioactive waste disposal facilities and hazardous waste treatment and disposal

facilities cannot be sited in an EV watershed. Coal Refuse Disposal facilities cannot be sited in an EV watershed unless that watershed is a "preferred site" (roughly defined as a watershed affected by unreclaimed mining areas, including acid mine drainage).

Proposed areas (Macoby Creek) with HQ status would not have as stringent protections as mentioned above for EV streams. HQ and EV status can be of benefit and provide for funding for the Dirt and Gravel Road Maintenance Program. These measures required in EV and HQ watersheds help protect the resource while still allowing development to take place in a sustainable manner.

What will EV/HQ status not do?

As mentioned above, EV/HQ status will not stop development activities but provide better mechanisms to ensure the watershed is protected when development takes place. EV and HQ status will not affect agricultural plowing or tilling practices or pesticide use. Regardless of the stream designation, agricultural plowing that disturbs 5,000 square feet or more of land, must be preceded by an implemented E&S Plan to control erosion and sedimentation. Current Nutrient Management Regulations for CAOs and CAFOs remain the same for all streams, regardless of their designated use. In most cases, existing facilities, such as sewage facilities, are permitted to continue to operate under all existing applicable approvals and permits. Permits to these facilities may also be renewed without any additional requirements after HQ or EV designation. EV/HQ status does not affect winter maintenance on roads; and bridge and culvert maintenance, repair or replacement.

Justification for the Requested Redesignation for the Upper Perkiomen Watershed

This petition will summarize evidence that illustrates that the Upper Perkiomen is deserving of an upgrade for many reasons: from its current water quality conditions, the watershed's natural and historical importance, its existing land use, diverse recreational opportunities, and the grass-roots and governmental commitment in the region (Montgomery County Conservation District, Lehigh County Conservation District) for stronger protections and past research and planning, to name a few. It was critical to the four co-petitioners that we gathered strong evidence that supports this petition as well as garner local and regional support. Key justification to support this petition includes the following points:

- **Water Quality Data** - Delaware Riverkeeper Network met with Stroud Water Research Center (SWRC) to review benthic macroinvertebrate data collected and analyzed by Stroud Water Research Center over the past several years. SWRC data clearly illustrate the Upper Perkiomen scores as one of the most diverse streams in the Schuylkill Basin. SWRC scientist, John Jackson states in his letter regarding monitoring results, "Based on (SWRC) 2005 and 2006 data, the Upper Perkiomen and Hosensack Creeks support a wide variety of macroinvertebrates that are indicative of clean water and good habitat, and comparable to those found in the Exceptional Value section of the West Branch of Perkiomen Creek." In fact, the Hosensack sub-watershed of the Upper Perkiomen achieved the highest water quality scores for benthic invertebrates in the entire 2,000 square mile Schuylkill watershed. The Macoby Creek and an unnamed tributary of the Macoby sampled by SWRC and the Delaware River Basin Commission in 2004 and 2005, indicate benthic life likely indicative to High Quality streams. See Section E4 for more details as well as Appendix B and Disk 1 for summary data provided by Stroud, Delaware River Basin Commission and Delaware Riverkeeper Network.
- **Restoration Projects** - The Upper Perkiomen Watershed highlights the positive investments PA DEP's Growing Greener Program has made to this local watershed through stream restoration and support from local partnerships over the past nine years. PA DEP, working with effective local partners who are supporting this petition and including Perkiomen Valley Trout Unlimited, Wildlands Conservancy, Lehigh County Conservation District, Montgomery County Conservation District, and Delaware Riverkeeper Network (not comprehensive list) have invested heavily in stream restoration projects throughout this region. There have been at least 23 restoration projects in the Upper Perkiomen (see Appendix C for a list of restoration projects in the Upper Perkiomen watershed). An example project is one that was implemented by Delaware Riverkeeper Network and Perkiomen Trout Unlimited that included ¾ mile of an unnamed tributary in Hereford Township , Berks County. The restoration included stream bank fencing, bank stabilization, and two cattle crossings. Another project involved PP&L employees removing five man-made dams along the Hosensack Creek. Finally, Montgomery County Conservation District has been

involved with numerous stormwater retrofit projects and green swales projects to clean and slow runoff in more developed areas of the watershed. These restorations, largely made possible by Pennsylvania's Growing Greener Program and funding through the Fish and Wildlife Service, have been a success and have improved water quality, riparian habitat, and in-stream diversity as indicated by benthic data pre- and post-restoration collected by Delaware Riverkeeper Network at some of these stream restoration sites (see Appendix B). By upgrading the Upper Perkiomen Watershed, PA DEP is illustrating the effective work it is doing on-the-ground to improve and restore water quality.

- **Drinking Water Supply** - The Upper Perkiomen Watershed tributaries drain into Green Lane Reservoir, an 805-acre impoundment owned by Aqua America (formerly Philadelphia Suburban Water Company), which serves as a primary drinking water supply for residents of Montgomery County. Water from the Perkiomen Creek is also shipped out of the watershed to augment Aqua PA water supplies throughout the Delaware Valley. In a one-year 1995 study, the largest sources of water to Green Lane Reservoir were the Main Branch Perkiomen Creek and the West Branch Perkiomen Creek at 13,188 and 8,381 million gallons per year, respectively. On a percent basis, the Main Branch Perkiomen represented 52.8% of the net total input of water to the Green Lane Reservoir that year[ii]. The area completely surrounding Green Lane Reservoir is a Montgomery County park open to visitors who want to camp, hike, horseback ride, and fish. As a drinking water supply, the Commonwealth should afford streams flowing into this basin the highest protection available.
- **Land Use Statistics** - What happens on the land affects water quality. The Watershed Conservation Plan for the Upper Perkiomen developed in 2001 used aerial photographs to show that impervious cover of the Upper Perkiomen Watershed was very low (See Table 1).

Table 1: Impervious Cover by Sub-watershed (Upper Perkiomen WCP, 2001)

Sub-watershed	Impervious Cover Percentage
Main Branch (above Green Lane Reservoir)*	1.3%
Main Branch (below Green Lane Reservoir)	6.6%
Northwest Branch*	1.5%
Hosensack Creek*	0.9%
Macoby Creek*	2.5%
Unami Creek	2.1%
Deep Creek	0.4%

* Streams/areas in the proposed upgrade area

Furthermore, a 2001 riparian buffer analysis of southeastern Pennsylvania streams conducted by the Heritage Conservancy, concluded that 155 stream miles (69%) of the 226 miles of waterways in the Upper Perkiomen Creek watershed benefit from buffers of at least 50 feet of woodland on each side of the stream (a.k.a."Full Forest Buffer"). None of the sub-watersheds of the Upper Perkiomen had less than 50% "Full Forest Buffer". See highlighted sub-watersheds and their riparian buffer statistics within the proposed upgrade area below:

Table 2: Percent Forested Buffer in Upper Perkiomen Watershed

Subwatershed	% Total in Full Forest Buffer
West Branch	67%
Macoby Creek	60%
Hosensack Creek	78%
Perkiomen – Upper Main Branch	53%

Finally, forest land, the best land cover condition for sustaining the quality and quantity of ground and surface water, ranks as the most dominant land use type, accounting for over 55% of the land in the Upper Perkiomen Watershed. This forest coverage is significantly higher than the average 35% of forest for most of the Piedmont forests in southeastern Pennsylvania.

- **Regional Reports and Plans Support Upgrade** - A DCNR funded Watershed Conservation Plan was developed for the Upper Perkiomen Watershed in 2001 by The Upper Perkiomen Watershed Coalition, Pennsylvania Environmental Council, and Natural Lands Trust. This plan represented an effort by residents of the watershed, municipal officials, local watershed associations, local and regional land trusts, and county agencies to identify major issues affecting water quality and quantity, as well as the living environment for local residents. The plan also listed a series of Implementation Strategies, many of which have been implemented. Furthermore, the plan states, " Certain stream segments (in the Upper Perkiomen) are believed to be higher in quality than the current designations reflect." Municipal officials responding to questionnaires and interviews recognized water quality issues as important. Twelve of the 14 respondents to the municipal survey thought that stream water quality was important to their municipality and 10 indicated that improving water quality in their municipality as well as for the entire creek should be emphasized in the Conservation Plan.

In 1994, Delaware Riverkeeper Network and Cahill Associates produced a report, "Upper Perkiomen Creek Watershed Management Study: Technical Report" and a compendium to this report, "Protecting the Future of the Upper Perkiomen Watershed – A Call for Action," for local citizens and community groups[iii]. One of the five recommendations for citizen action in the report listed, "Petition the PA DEP to upgrade streams in the Upper Perkiomen Watershed"[iv].

The Schuylkill Watershed Conservation Plan lists the Upper Perkiomen as a "high priority site" for its high habitat value[v]. Natural Land Trust's *Smart Conservation* project combined 15 land cover classes and assigned them habitat potential ranging from very poor, poor, adequate to good for each of 6 taxa classes (i.e., mammals, birds, herpetofauna (i.e., reptiles and amphibians), invertebrates, plants and aquatics). The Upper Perkiomen was listed as a priority for conservation due to its habitat value and was one of twelve sub-watersheds listed in the Schuylkill Basin under this special value designation.

- **Municipal Support** – Municipal and other government efforts illustrate that practices taking place in the region are working to preserve the character of the region. The townships of the Upper Hosensack basin are currently in the process of updating and improving their natural resource ordinances and use of best management practices. This is being guided by a multi-municipal comprehensive plan which covers five adjacent municipalities. In Upper Milford Township, a complete natural resources ordinance review has just been completed, and the recommendations of that review are being implemented in the township's update of its Zoning Map and SALDO. Additional recommendations being implemented are significantly increased Erosion and Sedimentation control practices, a newly restrictive Act 167 ordinance which requires all stormwater to be treated by at least two best management practices, and a two-zone riparian buffer ordinance. In Lower Milford Township, a complete reworking of the Zoning Ordinance is being carried out presently by the Brandywine Conservancy; among the changes is expected to be significant riparian buffer protection. Additionally, Lower Milford Township is also carrying out a complete natural resource ordinance review, and is expected to adopt numerous protective measures later this winter and next spring, once the process is complete.

  A survey of municipal officials completed in 2001 as part of the Watershed Conservation Plan indicated that 12 of the 14 municipalities responding thought that stream quality was important to their municipality. It was noted that CWF designations should remain in portions of the streams where they are in affect and where applicable, these designations should be upgraded to EV status.

- **Protected Open Space & Recreation** – The Upper Perkiomen Watershed has an estimated 7,970 acres, or 8.6% of the watershed in protected open space lands in the form of agricultural easements (4.5% of watershed or 4,182 acres), privately preserved lands (.04% of watershed or 363 acres), and county parks (3.7% of watershed or 3,425 acres). Montgomery and Lehigh County portions of the watershed have the largest areas protected under agricultural easements. Sections of the West Branch Perkiomen Creek and the Upper Main Branch Perkiomen Creek are designated as Class A Wild Trout streams due to their high biomass of wild brown trout. The Indian Creek and

Hosensack Creek have also been identified as having stream sections that support natural reproduction of trout.

The area completely surrounding Green Lane Reservoir is a Montgomery County park (Green Lane Reservoir Park) open to visitors who want to camp, boat, ice skate, hike, horseback ride, and fish. Parts of this watershed are favorite spots for birding enthusiasts as well. Mensch Mill Camp on the West Branch Perkiomen holds summer camps and conferences year round and historic Mensch Mill dam runs directly through camp property. Upper Perkiomen Park on the outskirts of Green Lane also borders the Macoby Creek.

- **Other Unique Natural Features** The four counties within the Upper Perkiomen watershed have participated in the Natural Areas Inventory program sponsored by the Pennsylvania Science Office of the Nature Conservancy and funded in part through the PA Department of Conservation and Natural Resources. This 1995 Natural Areas Inventory lists an unusually rich array of Priority 1 Sites of Statewide Significance and Priority 2 Sites of Local Significance within the Upper Perkiomen as priorities for biodiversity conservation. The Upper Perkiomen Valley supports the highest concentration of Natural Areas Inventory priority sites in all of Montgomery County. Section E6 includes a description of each of the specific sites in the Natural Areas Inventories for Lehigh and Montgomery Counties.

- **Physiographic Region of National Recognition** The northern half of the Upper Perkiomen watershed including Blackhead Hill, Furnace Hill, Carl Hill, and South Mountain is also part of the Highlands area designated by Congress for special protections as a source water area for major east coast cities, including New York City and Philadelphia. This landform crosses through the watershed in a northeast to southwesterly direction, forming the ridges that constitute to the headwaters area of Green Lane Reservoir and is part of the larger New England Highlands province.

Cultural History

The Upper Perkiomen Creek watershed is an area of rich historical and cultural heritage. The region's first documented inhabitants were the Lenni Lenape, the oldest of the Algonquian tribes of the northeast. The Lenape lived off the native hardwood forest landscape and the pristine stream systems for thousands of years until they relinquished their environment to William Penn in 1685.

In the early 1700's, the Europeans began transforming the woodlands into fertile farmland. The first of the European settlers to the Upper Perkiomen Valley were of German origin; they coined the Valley as "Goschenhoppen". These settlers were predominantly Lutheran; the Schwenkfelder family established the New Goschenhoppen Reformed Church in 1727. Catholicism was established in the Valley with the construction of a Roman Catholic Chapel in Bally in 1741. Mennonites in Hereford and Upper Milford also constructed several meetinghouses. By the mid-18th century, European settlers instilled their way of life throughout the majority of the Upper Perkiomen Valley.

As communities became strongholds of production, a dependence upon the headwaters of the Upper Perkiomen Watershed was established. Economic and population growth would not have been possible without the stream systems, as they provided a steady source of power for numerous mills such as sawmills, gristmills, linseed oil mills, and powder mills that supplied the Continental Army with gunpowder during the Revolutionary War. The earliest mill location in the Valley was established on the Indian Creek in 1737; at least ten more mills were later built along the channel. Additionally, the Hosensack Creek harbored a considerable number of mills, as did the West Branch of the Perkiomen. The streams were also integral to the operation of blast furnaces in iron production. The region was ideal for iron production, as iron ore, limestone, and charcoal (from local oak, hickory and ash) were readily available.

In the 19th century, progress continued to escalate. The villages of East Greenville, Pennsburg, Red Hill and Green Lane became major manufacturing centers, boasting commercial hubs, general stores, hotels, railroad stations, school houses, blacksmith shops, breweries, and carriage works. The industrial boom, unrelenting in the early 20th century, spawned clothing and hosiery plants, broom factories, green houses, cigar factories, furniture

manufacturers, metal stampings and wire factories, and printers in the Upper Perkiomen Valley, all of which made use of the water resources in the area by some means. During the post World War II period, the Valley maintained its character by concentrating development in or near existing towns, unlike most areas in the Philadelphia region that shifted toward suburban development. Farmland and important woodlands are predominantly intact to this day, although current trends in commercial and residential development are pose a severe threat. It vital to ensue smarter growth practices to maintain this scenic landscape and way of life so that the Upper Perkiomen and its tributaries can continue to serve as a remnant of the past culture and pristine nature for future generations.

C. Describe the types of persons, businesses, and organizations likely to be impacted by this proposal.

The majority of entities within the watershed will benefit from this upgrade. Small and large landowners will see an increase in their property values because they live in a healthy ecosystem. With EV designation, these landowners will also have better protection from hazardous waste sites and other threats to their watershed. The many farmers of the region will benefit from clean water to irrigate their crops and livestock. Many of the farmers in the watershed already have their farms in conservation easements or have implemented stream restoration projects on their property to help preserve the character of the area and as noted above, nine farmers signed on in support of the upgrade as co-petitioners. Recreational opportunities in the Upper Perkiomen Creek will also be enhanced. For example, sections of the West Branch are already Class A Trout Streams and Indian Creek and Hosensack Creek are known to support natural reproduction of trout; both are favorite fishing spots for anglers. This region is highly prized by the Trout Unlimited, Perkiomen Valley Chapter #332 as evidenced by all of the restoration and protection efforts in the region they helped implement over the years. Businesses including, Fabricated Alloy Products, Wright Wine Works, Landhaven, and Bertoia Studios also signed on in support of the upgrade. Lower Milford Elementary School uses the Hosensack Creek, which runs through the school property, for educational purposes and will benefit from clean waters for the children who study and wade in this stream during the school year. The Mensch Camp along the West Branch Perkiomen holds summer camps and conferences and their property borders the stream. Upper Perkiomen Watershed Coalition, a grass-roots watershed group in the region that sponsors the annual AquaFair Festival every year that is held near Green Lane will also benefit from

cleaner waters and is a co-petitioner for this petition. The Aquafair focuses on watershed education and getting the community involved and engaged in watershed protection and restoration. East Greenville Municipal Water Authority and Aqua America (as well as the residents supplied with water from these companies) will also benefit from EV designation, as their water intakes are located further downstream. The 42-year old Perkiomen Watershed Conservancy, that operates downstream of Green Lane Reservoir, and provides environmental education opportunities for children and adults throughout the region, will benefit from cleaner water for their education programs. These diverse groups listed above are only a sampling of the citizens, businesses, non-profits, and utilities that will benefit positively from a stream upgrade of the Upper Perkiomen region.

EV designation will not limit economic growth and development plans but allow for development in a way that preserves the integrity of the watershed by requiring special Best Management Practices that foster better planning and implementation of development plans. The main change for new development will be that discharges are of high quality or modified to use land application of discharge water. As illustrated in DEP's Antidegradation Manual, there have been development plans approved in EV watersheds in the past. An example near this proposed upgrade area is a residential development, Penn's View in Lynn Township, approved in late 2005 by both the Lehigh County Conservation District and the PA DEP in a small EV watershed. There were no troubles getting the development plan through the approval process, but additional permitting requirements were put in place because of the EV designation to better protect the area.

D. Does the action requested in the petition concern a matter currently in litigation? If yes, please explain.

No

E. For stream redesignation petitions, the following information must be included for the petition to be considered complete. Attach supporting material as necessary.

E1. A clear delineation of the watershed or stream segment to be redesignated, both in narrative form and on a map.

The co-petitioners are requesting consideration of EV status for the entire Upper Perkiomen Watershed above the Green Lane Reservoir and HQ status for the Macoby Creek, a tributary to the Perkiomen Creek. See Appendix D for a map of the proposed upgrade area.
The Perkiomen Creek headwaters begin in Hereford Township, Berks County on the south-facing slopes of a wooded ridge near Seisholtsville near SR1047. The major tributaries of the upper portion of the Perkiomen Creek, the West Branch, Indian Creek, and Hosensack Creek also have their sources along this ridge, which includes Blackhead Hill, Furnace Hill, and South Mountain. Major subwatersheds of the Upper Perkiomen include:

- All of the Hosensack Watershed and all of its tributaries from its headwaters near the Northeast Extension of the Turnpike in Lower Milford Township, Lehigh County to its confluence with the Perkiomen Creek in Upper Hanover Township, Montgomery County. The Hosensack Watershed is 7.4 miles in length and runs southwest as it drains 18 square miles. This subwatershed is predominantly rural, with woodland and agricultural land defining most of its land cover. Indian Creek, a tributary to the Hosensack covering 4.4 square miles, rises along the wooded ridge known as South Mountain in Upper Milford Township, Lehigh County and flows southeast, under Route 100/29 to its confluence with the Hosensack.
- All of the Upper Main Branch of the Perkiomen Creek and all of its tributaries, from its headwaters which originate near the hamlet of Seisholtsville and Harlem in Hereford Township, Berks County and flows to the southeast past Hereford and into the central valley past Palm and East Greenville before it reaches the Green Lane Reservoir in Upper Hanover Township. The headwaters of this subwatershed are dominated by forested ridges with a fairly complete forested riparian buffer, while the middle section is primarily farmland with scattered residential development.
- All portions of the West Branch Perkiomen not already designated as Exceptional Value, including the headwaters section from its source near Dogwood Drive in District Township, Berks County to SR1022 and the portion of the stream from SR2069 Bridge to the Mouth where the West Branch meets the Green Lane reservoir

in Upper Hanover Township. The West Branch is the third largest tributary system in the Upper Perkiomen watershed and it drains an area of 23 square miles with over 11.8 miles of stream. The headwaters portion of this watershed includes a mix of woodland and scattered residential development, with agricultural lands in the uppermost reaches. The stream has a fairly significant drop in gradient before reaching a more level central valley of agricultural lands adjacent to Green Lane Reservoir.

- All of the Macoby Creek and all of its tributaries, including Stony Run from its source near Krassdale in Lehigh County to just east of Rte 29 where the Macoby enters the Green Lane Reservoir.
- All of Molasses Creek from its headwaters just north of Kutztown Road near West Forty in Upper Hanover Township to its mouth with the Green Lane Reservoir near Church Road in Green Lane Reservoir Park.

E2 The current designated uses of the watershed or segment.

- The Hosensack Watershed including locally known tributaries of Indian Creek and Walters Creek and all of its unnamed tributaries are currently designated Cold Water Fishery(CWF) as outlined in Chapter 93.
- The Upper Main Branch of the Perkiomen Creek from its source near Seisholtsville to SR 1010 Bridge at Hereford is designated High Quality Cold Water Fishery (HQ-CWF). The Upper Main Branch, from SR 1010 Bridge to Green Lane Reservoir Dam is designated Trout Stocked Fishery (TSF)
- Portions of the West Branch proposed for an upgrade are currently designated Cold Water Fishery (CWF). Specifically, West Branch Source to SR 1022 Bridge is CWF and SR 2069 Bridge to Mouth is CWF. (The "middle" section of the West Branch Perkiomen from SR1022 to SR2069 bridge at RMI 12.9 is already Exceptional Value Status (as of 2001). From the PA DEP July 2001 Stream Redesignation Evaluation Report for the West Branch, PA DEP stated that, "The station in the headwaters of the basin had a score of 80% of the reference station score. This score was probably caused by degradation of the benthic habitat and lower gradient, not by poor water quality as evidenced by the significantly higher scores at the two stations farther downstream.")
- All of Macoby Creek is designated Trout Stocked Fishery (TSF).

E3. The requested designated uses of the watershed or segment.

The petitioners are requesting that all portions of the Upper Perkiomen listed above in section E2 be designated Exceptional Value (EV) with the exception of the Macoby Creek Watershed which petitioners request an upgrade to High Quality (HQ).

Specifically, petitioners request:

- The Hosensack Watershed including locally known tributaries of Indian Creek and Walters Creek and all of its unnamed tributaries be changed to EV status.
- The Upper Main Branch of the Perkiomen Creek from its source near Seisholtsville to SR 1010 Bridge at Hereford be designated EV. The Upper Main Branch, from SR 1010 Bridge to Green Lane Reservoir Dam be designated EV.
- West Branch Source to SR 1022 Bridge be designated EV and the West Branch SR 2069 Bridge to Mouth be designated EV
- All of Macoby Creek and Molasses Creek and tributaries be designated HQ.

E4. Available technical data on instream conditions for the following: water chemistry, the aquatic community, or instream habitat. If such data are not included, provide a description of the data sources investigated.

The petitioners have various technical data cited below from a variety of reports and data collectors that illustrate the water quality of the Upper Perkiomen. Appendix B and Disc 1 includes some of the datasets described below.

1) Stroud Water Research Center has been using stream macroinvertebrates to monitor stream conditions at over 116 locations in the Schuylkill River basin since 1996. This includes 40 sites in the Perkiomen Creek watershed. These are distributed across all of the major tributaries (i.e., Swamp, West Branch, Upper, Hosensack, Unami, East Branch, and Skippack). One site (on the West Branch just upstream of the Green Lane reservoir) is one of 19 sites that SWRC has sampled annually since 1996. This site is consistently one of the best sites sampled and clearly deserving of the Exceptional Value status awarded in 1997. SWRC uses this site as a reference as an unimpaired stream. Another nearby site that SWRC samples annually is on the mainstem of Perkiomen Creek just upstream of the Green Lane Reservoir. This is the 5th best site SWRC monitors annually for the entire Schuylkill Basin.

In 2005 and 2006, SWRC added a total of six additional sites (2 in 2005, 4 in 2006) on the tributaries of the mainstem of Perkiomen Creek upstream of the Green Lane Reservoir. The

two sites sampled in 2005 were the 2nd (Hosensack Creek) and 4th (mainstem of Upper Perkiomen Creek) best of the 38 sites SWRC examined that year - both had scores that were greater than scores at the Exceptional Value site on the West Branch in 2005. The four sites SWRC sampled in 2006 were the 1st (Indian Creek), 3rd (headwaters of Upper Perkiomen Creek), 4th (West Branch Hosensack Creek), and 9th (East Branch Hosensack Creek) best of the 40 sites SWRC examined in 2006. All had scores that ranked better than the Exceptional Value site on the West Branch in 2006. SWRC also collected data for the Macoby Creek in 2005 and reviewed DRBC data available for Macoby Creek. Dr. John Jackson stated that Macoby Creek can likely meet HQ designation based on the benthic macroinvertebrates collected. In SWRC's co-petitioner letter, Dr. John Jackson states, "These streams are excellent examples of healthy streams in southeastern Pennsylvania. Many streams in this region have been impacted by years of development and use, including in neighboring tributaries of Perkiomen Creek (e.g., Skippack Creek or Swamp Creek). Every effort should be made to protect Upper Perkiomen and Hosensack Creeks from this fate as they represent a wonderful natural resource that will be viewed as a tremendous cultural and environmental asset by future generations. Elevating the stream designation to Exceptional Value will provide local landowners and municipal officials with another planning tool needed to help protect the watershed." The details and data for these sites are available at www.stroudcenter.org/schuylkill and Appendix B also includes hard copies from the website.

2) Delaware Riverkeeper Network has water quality data collected by trained volunteer monitors for the Upper Perkiomen and Macoby Creek that include parameters for dissolved oxygen, nitrogen, pH, temperature and ortho-phosphate. There are three sites on the West Branch and two sites on the Macoby Creek. As part of this upgrade effort, more sites were established on Macoby Creek in August and September 2006. The three West Branch Perkiomen Creek stations, where monthly samples were taken between 1997-2001, were analyzed and indicated healthy average dissolved oxygen levels of 10.9 mg/l, 11.1 mg/l, and 11.5 mg/l for those five years. Average nitrate-nitrogen levels were also low and at healthy readings of 0.8, 0.8, and 0 .9 mg/l. Average pH readings were also at healthy levels at 7.4, 7.6, and 7.6. Macroinvertebrate monitoring at two stations in the West Branch were conducted by DRN in 2001 using a semi-quantitative method and ID streamside to Order level. Using EPA's metrics, both stations scored "good" in 2001 for having a variety of pollution sensitive species.

Water quality data was collected by a trained volunteer monitor for Macoby Creek at two sample stations from 2002-2005 (2006 data also available). The first sample station (MC001) was located near the headwaters of Macoby Creek while the second sample station was near the mouth in Green Lane. Both stations were sampled 20 times during the 2002 - 2005 time period and there was very little difference from the headwaters site and the mouth site, indicating healthy water quality measures throughout this stream, despite its high number of NPDES discharges. The headwaters site (MC001) had an average dissolved oxygen of 8.9 mg/l; average percent saturation of 81.8%; an average pH of 7.4; an average nitrate nitrogen of 0.3 mg/l and all ortho-phosphate readings were below the minimum detection limit (0.2 mg/l) except for one reading in September 2003. The site in Green Lane near the mouth (MC002) had an average dissolved oxygen of 9.9 mg/l; average percent saturation of 90.2%; an average pH of 7.6; an average nitrate nitrogen of 0.3 mg/l and all ortho-phosphate readings were below the minimum detection limit (0.2 mg/l). A special study was performed in July and August, 2006 to better supply data for the Macoby for this stream upgrade petition. During July and August, 2006 additional water quality results were collected from five additional stations on the Macoby Creek mainstem, tributaries, and Stoney Run tributary. These samples were taken the hottest and driest time of the year but results were still within an acceptable range. The average dissolved oxygen for all of these sites in July and August was 6.9 mg/l and 77.5% saturation. Nitrate-nitrogen and ortho-phosphate levels were non-detectable and below the minimum detection limits of 0.2 mg/l respectively; the pH was at a healthy level, ranging from 7.5 to 8 depending on the stream station.

3) Delaware River Basin Commission (DRBC) sampled an unnamed tributary to Macoby Creek in 2005. Eighteen benthic groups were collected at the sample station and over 246 individual specimens were counted. SWRC reviewed this data and indicated that based on this sample, the Macoby Creek could likely meet HQ water quality standards. (See Disk 1)

4) Hammell, in the working draft of "Planning for Water Quality Monitoring and Riparian Restoration in the Schuylkill Watershed", referenced a 1986 PA DEP study that found the main branch of the Perkiomen upstream of the Green Lane Reservoir exhibits fairly good water quality and aquatic habitat.

5) In a more recent study by Boyer entitled, "Aquatic Biology Investigation for the Perkiomen Creek in Berks and Lehigh Counties" in 1998, physical characteristics, field parameters (pH, dissolved oxygen, temperature, specific conductance), samples for lab analysis (SAC 035), qualitative invertebrate data and fish community information were collected at two stations in the Upper Perkiomen Creek headwaters in Hereford Township, Berks County. The water quality was reported "very good" at one station and "excellent" at the other. The report concluded that the Perkiomen Creek headwaters support a well-established trout fishery as well as an extremely diverse benthic community. It recommended consideration of the Perkiomen Creek north of SR 1010 bridge for redesignation to EV status.

6) A 1937 National Youth Administration sanitary survey documented "good" water quality with some agricultural runoff impacts for the West Branch Perkiomen (Cahill, 1994)

7) In January 1994, Cahill Associates prepared a report for Delaware Riverkeeper Network, "Upper Perkiomen Creek Watershed Management Study: Technical Report." This report summarized various data sources in the region. (A copy of this report can be obtained by contacting Delaware Riverkeeper Network.)

8) USGS Data – Two gaging stations measure flow levels, volumes, and velocities in the Upper Perkiomen watershed, just above Green Lane Reservoir –Station #01472198 is located on the main stem Perkiomen upstream from the bridge on Church Road, 0.9 miles upstream from Molasses Creek. It measures flow from the upper portion of the main stem Perkiomen Creek, Hosensack Creek, and Indian Creek. Station #01472199 is located on the West Branch Perkiomen Creek at Hillegass, 0.3 miles downstream from a bridge on private road.

9) The Heritage Conservancy conducted a regional riparian buffer analysis program (RBAP) of southeastern Pennsylvania streams in 2001. The RBAP concluded that 155 stream miles (69%) of the 226 miles of waterways in the Upper Perkiomen Creek watershed benefit from buffers of at least 50 feet of woodland on each side of the stream (a.k.a."Full Forest Buffer"). None of the sub-watersheds of the Upper Perkiomen had less than 50% "Full Forest Buffer".

See highlighted sub-watersheds and their riparian buffer statistics within the proposed upgrade area below:

Table 2: Percent Forested Buffer in Upper Perkiomen Watershed

Subwatershed	% Total in Full Forest Buffer
West Branch	67%
Macoby Creek	60%
Hosensack Creek	78%
Perkiomen – Upper Main Branch	53%

10) **Healthy Fish Populations and Presence of Wild Brook Trout** - Hosensack Creek was sampled by the PA Fish and Boat Commission in 1983 and 2000 and Tom Shervinskie of the Commission stated the following in an email dated 3/29/05:

"Hosensack Creek supports a wild brown trout population in addition to a moderately diverse warmwater/coolwater fish community. Fish species found in the Hosensack included: small mouth bass, blacknose dace, bluegill, common shiner, cutlips minnow, fallfish, largemouth bass, longnose dace, rock bass, shield darter, swallowtail shiner, tesselated darter, white sucker, pumpkinseed, redbreast sunfish, creek chub, green sunfish, and the occasional stocked rainbow trout. The fish species require a variety of habitats to reproduce and would therefore indicate a very good physical stream habitat must be present to support this fish community. Water chemistry analysis was indicative of a limestone influenced stream. The total alkalinity was 80 ppm, total harness was 116 ppm and the pH was 7.7 standard units. This type of water chemistry generally supports a very good fish community and this is the case for the Hosensack Creek." A search was completed on the PA Fish and Boat Commission website and no other data or biologists reports were available for the proposed upgrade area on-line.

The West Branch Perkiomen was also sampled for fish as part of the 2001 PA DEP water quality standards review. A total of 11 species of fish were collected at two stations. Wild brown trout were common at both stations and the presence of young of the year brown trout proves natural reproduction of this species in the basin. The PA Fish and Boat Commission has designated the main stem West Branch Perkiomen Creek from SR1022 downstream to SR2069 and unnamed tributary 01455 as Class "A" Wild Trout Waters. Other species beyond the brown trout found during this PA DEP survey included common shiner, cutlips minnow, blacknose dace, longnose dace, fall fish, creek chub, white sucker, redbreast sunfish, rock bass, and tessellated darter.

E5. A description of existing or proposed point and nonpoint source discharges and their impact on water quality and/or the aquatic community. The names, locations, and permit numbers of point source discharges and a description of the types and locations of nonpoint source discharges should be listed.

Point Source Discharges

According to the 2001 Upper Perkiomen Creek Watershed Conservation Plan, the Upper Perkiomen has 42-point source discharges and at least seven of these were described as "land application" systems (6 spray irrigation/1 drip irrigation) that discharge to soil rather than the stream (see Map in Appendix D). The 2001 WCP cites that Upper Perkiomen Creek has 14 discharges; Hosensack Creek has 0 discharges; West Branch has 6 discharges; and Macoby Creek has 12 discharges. Macoby Creek is categorized as handling a high amount of wastewater and industrial treatment plants relative to its size. The petitioners performed a search of NPDES permits in the proposed upgrade area only and generated 40 current discharges with NPDES permits and 10 discharges that may no longer be active. The list was generated in October 2006 using PA DEP eMap as well as the EPA website and past reports.

The Hosensack Creek remains the last major tributary to the Upper Perkiomen Watershed with no impacts from point-source pollution sources, according to our recent search and communications with township officials.

At least 14 industrial wastewater treatment plant discharge points are documented for the Upper Perkiomen Creek watershed. Many of these are concentrated along the Route 29 and Route 663 corridors in the Macoby Creek and main stem Perkiomen Creek watersheds. Knoll Furniture and Brown Printing each have plants just north of East Greenville. The Hershey chocolate company and Entrance Systems, Inc. each have plants east of Pennsburg. The table below lists the point source discharger, NPDES permit number, and nature of the discharge if available for known NPDES permits within the proposed upgrade area. See the table on the next page with a comprehensive list of NPDES discharges in the proposed upgrade area.

Point Source Discharge	Recent NPDES #	Nature of Discharge
Bally Boro. Well 3	PA0055123 (2005)	Ground Water Clean Up Discharge Point
Bally Boro. Well 3 Air Stripper System WTP	PAR903511 (2003)	Ground Water Clean Up Discharge Point
Bally Borough	PA0022543 (2005)	Sewerage Systems
Blommer Chocolate	PA0058866 (2005)	NCCW Cool Towers 1&3, Boiler, On Basin B near Railroad SWRO; and Retention Basin A NCWW Outfall
Brown Printing Co.	PA0051802 (2004)	Industrial Waste
Cherrydale Farms- IWTP	PAR120024	Stormwater-Industrial/producer of candy
David Bosico	PA0058718 (2003)	Single Residence Treatment Plant
Doug Jones	PA0058106	Single Residence Treatment Plant
Dwayne & Beth Sierver	PAG042211 (2004)	Operators of dwellings other than apartment buildings
Glenn & Patricia Snyder	PAG042208 (2002)	Operators of dwellings other than apartment buildings
Green Lane Auto Sales & Parts, Inc.	PAR600061 (2005)	Stormwater/Industrial Waste
Hereford Estates WWTP	PA0041505 (2003)	Residential Mobile Homes
Hershey Foods Corporation - IWWTP	PA0057967 (2005)	Industrial Waste
HPE Extrusion Solutions	PA0247961 (2006)	Industrial Waste
Jason & Cheryl Kulp	PA0054500 (2003)	Single Residence Treatment Plant
Jay & Debbie Delp	PAG040020 (2005)	Operators of dwellings other than apartment buildings
Joseph Kuroski	PA0058661	private household
Knoll Inc.	PA0011070 (2004)	SEW/IW/NCCW Outfall; Stormwater, Internal STP, and NCCW/SWRO Outfalls
Knoll Inc. - Batch Treatment Pits, STP Extended Aeration	PA0011070 (2004)	Industrial Waste (furniture manufacturing plant)
Longacres Modern Dairy Inc.	UNPA4	Stabilization Lagoon Treatment Plant, Industrial Waste
Lower Milford Elementary School		
Macoby Creek STP	PA0055875 (2006)	Industrial Waste
McGuire Residence	PAG043604 (2004)	Operators of dwellings other than apartment buildings
Michael Cleary	PAG040027 (2005)	Operators of dwellings other than apartment buildings
Mountain Village Mobile Home Park		
Plummer Precision Optics	PA0053864	Industrial Waste
Poor Richards Historic Inn	PA0086371 (2004)	Hotel
Ramalingam SRSTP	PA0054259 (2003)	Sewage Systems
Red Hill Water Authority	PA0053872 (2002)	Industrial Waste

NPDES Discharge (cont'd)	Recent NPDES #	Nature of Discharge
Richard O'Leary	PA0053139 (2003)	Single Residence Treatment Plant
Scott Heilman	PA0084557	0.0005 mgd permitted
Steven and Joann Glueck	PAG040016	Palm - operators of dwellings other than apartment buidlig
Strawberry Family Restaurant	PA0053376 (2004)	Industrial Waste
Texas Eastern Gas Pipeline Co.	PAG103513	Bernville Hydrostatic Discharge
Texas Eastern Transmission LP	PAG1035	Hydrostatic Test Site Industrial Waste
Todd Ferrence	PA0054178 (2001)	Sewerage Systems
Upper Montgomery Joint Authority (Upper Hanover)	PA0020532 (2005)	Stormwater/Industrial Waste
Washington Township WWTP	PA0086142 (2005)	Industrial Waste
William McPhillips	PA0056499 (2002)	private household
William Stoneback	PA0057151 (2002)	Single Residence Treatment Plant
Woodland MHP WWTP	PA0055352 (2003)	Operators of dwellings other than apartment buildings; permitted 0.014 mgd
Woodrow Heilman	PAG043547 (2006)	Operators of dwellings other than apartment buildings
Upper Perkiomen YMCA	PA0056812	Swimming Pool Filter Backwash
No New Approvals on Record		
Bally Block Co. Laminated Hardwood Manufaturing	PAR223510 (2000)	Stormwater-Industrial
Bally Engineered Structure	PAR113501 (1995)	Industrial Waste
East Greenville Boro. Water Dept.	PA0050644 (1999)	Water Filtration Plant Outfall
Fluid Energy Processing	PAR210016 (1996)	Minerals and earths, ground or otherwise treated
Genes Used Auto Parts	PAR600067 (2000)	Stormwater-Industrial
George Phillips Estate	PAR600059 (2000)	Used Motor Vehicle Parts
John Betz STP	PA0063916 (1999)	
Nesters Auto Sales	PAR113503 (2000)	Stormwater-Industrial
Patrick O'Neill	PA0058254 (2001)	Aerobic treatment plant
Pratt Residence	PA0058084 (2000)	Single Residence Treatment Plant

Non Point Source Discharges in the Upper Perkiomen

Nonpoint source pollution is often carried as stormwater runoff from the following sources:

- roads and parking lots (i.e. hydrocarbons, heavy metals, sediment, road salt);
- lawns (fertilizers, pesticides, dog waste);
- cultivated fields (soil erosion/sedimentation)
- construction sites (soil erosion/sedimentation)
- livestock pastures (manure, soil erosion/sedimentation)
- stormwater management facilities
- on-lot septic systems

The Cahill study estimated that nonpoint sources accounted for 84 percent of the pollutant loadings in the three reservoirs in the Upper Perkiomen watershed (Cahill, 1994). Browne estimated that nonpoint sources contribute 93 percent of annual phosphorus loads and 100 percent of annual sediment loads to Green Lane Reservoir (Browne, 1998). Cahill further quantified that 47 percent of nonpoint phosphorus loadings occur during dry weather. The probable sources are malfunctioning or poorly maintained septic systems and livestock encroachment directly into streams. Browne found that agricultural runoff contributes 84 percent of total phosphorus loads to Green Lane Reservoir. Conversely, Cahill quantified that 53 percent of nonpoint phosphorus loadings occur during wet weather. The probable sources are agricultural and existing suburban development runoff. Agricultural runoff sources include sediment laden with fertilizers on cultivated crops or livestock waste from pastures and feedlots or manure applied on cropland. The primary suburban runoff sources are lawn areas where fertilizers are applied.

It is important to note that since these studies, there have been at least 24 restoration projects in the Upper Perkiomen that have restored buffers along grazing areas with streambank fencing and buffer planting projects and infiltrated stormwater runoff through bioretention swales, filter strips and naturalized basins. Data collected pre- and post- restoration by Delaware Riverkeeper Network and the Academy for Natural Sciences, Patrick Center at some of these projects show the return of diversity in the benthic community as the buffers filter out pollution from the agricultural runoff. It is also important to note that though non-point sources are present, riparian buffers in this region are rather intact (Heritage Conservancy study). Impervious Cover of the Subwatersheds (see Section E7) in this region is low (so far) compared to other watersheds in the surrounding regions and helps filter out pollution from non-point sources.

E6. Information regarding any of the qualifiers for designation as high quality waters (HQ) or exceptional value waters (EV) in 93.4b (relating to qualifying as High Quality or Exceptional Value waters) used as a basis for the requested designation.

Section 93.4b "Qualifying as High Quality waters"

Some sections of the proposed upgrade area of the Upper Perkiomen Watershed are already designated High Quality Water, therefore meeting the requirement of subsection (a) of Section 93.4b. These HQ sections include:

- The Upper Main Branch of the Perkiomen Creek from its source near Seisholtsville to SR 1010 Bridge at Hereford is designated High Quality Cold Water Fishery (HQ-CWF).

- The "middle" section of the West Branch Perkiomen from SR1022 to SR2069 bridge at RMI 12.9 is already Exceptional Value Status (as of 2001). From the PA DEP July 2001 Stream Redesignation Evaluation Report for the West Branch, PA DEP stated that, "The station in the headwaters of the basin had a score of 80% of the reference station score. This score was probably caused by degradation of the benthic habitat and lower gradient, not by poor water quality as evidenced by the significantly higher scores at the two stations farther downstream."

Other sections not already HQ, have benthic and water chemistry data collected by Stroud Water Research Center, Delaware Riverkeeper Network, and Delaware River Basin Commission that show a robust community of macroinvertebrates and pollution sensitive species and healthy water quality measures. See Appendix B and Section E4 for more information.

Section 93.4b "Qualifying as Exceptional Value waters"

The water meets the requirements of subsection (a) and one or more of the following:

(i) The water is located in a National wildlife refuge or a State game propagation and protection area. - **NO**

(ii) The water is located in a designated State park natural area or State forest natural area, National natural landmark, Federal or State Wild River, Federal wilderness area or National recreational area. - **NO**

(iii) The water is an outstanding National, State, regional or local resource water. -**YES**

(iv) The water is a surface water of exceptional recreational significance. – **YES**

(v) The water achieves a score of at least 92% (or its equivalent) using the methods and procedures described in subsections (a)(2)(i)(A) or (B). **YES**

(vi) The water is designated as a "wilderness trout stream" by the Fish and Boat Commission following public notice and comment. – **NO**, but there is a presence of wild brook trout within the proposed upgrade area

E6.(iii) The water is an outstanding National, State, regional or local resource water.

The Upper Perkiomen Watershed has many significant resources that provide benefit to the community and the environment that must be protected. They include:

Drinking Water Supply

Many residents in the Upper Perkiomen rely on groundwater and private wells and municipal water supply systems.

Municipal Water Supply Systems (From 2001 Upper Perkiomen WCP)

System	Number of Connections	Service Area	Avg Daily Use (gpd)	Capacity (gpd)
Upper Hanover Water Authority	1,023	Pennsburg, U. Hanover, Hereford	3 wells	726,000 gpd
Milford Water Authority	1,080	Milford, Trumbauersville	5 wells in Milford	220,000 gpd
Red Hill Water Authority	705	Red Hill, Hereford, U.Hanover, U. Milford	2 wells and spring fed reservoir	400,000 gpd
East Greenville Borough	1,082	E. Greenville	1 well & Perkiomen Crk withdrawal	242,000 gpd
Bally Borough		Bally Borough	1 well	100,000 gpd

The Upper Perkiomen feeds the Green Lane Reservoir, which is a primary drinking water supply that services a half million people in Montgomery and Chester counties. Green Lane Reservoir is an 805-acre impoundment owned by Philadelphia Suburban Water Company, now known as Aqua America. Note that many restoration projects in the Upper Perkiomen were done in partnership with the water company who recognized the value of protecting the streams flowing into the reservoir. In a one-year 1995 study, the largest sources of water to Green Lane Reservoir were the Main Branch Perkiomen Creek and the West Branch Perkiomen Creek at 13,188 and 8,381 million gallons per year, respectively. On a percent basis, the Main Branch Perkiomen represented 52.8% of the net total input of water to the Green Lane Reservoir that year[vi]. All of the land surrounding Green Lane Reservoir is public park and open space managed by Montgomery County. As a drinking water supply, the

Commonwealth should afford streams flowing into this basin the highest protection available.

Rivers Conservation Registry

The Upper Perkiomen Creek Watershed is on the Pennsylvania Rivers Conservation Registry (as of June 2003) administered by the Department of Conservation and Natural Resources Bureau of Recreation and Conservation. There is a 2001 Upper Perkiomen Watershed Conservation Plan in place for this area. Projects identified in the Plan become eligible for implementation, development or acquisition grant funding through the Program.

Sites Listed on the Natural Areas Inventory

The counties within the Upper Perkiomen watershed have participated in the Natural Areas Inventory program sponsored by the Pennsylvania Science Office of the Nature Conservancy and funded in part through the PA Dept of Conservation and Natural Resources. This 1995 Natural Areas Inventory lists an unusually rich array of Priority 1 Sites of Statewide Significance and Priority 2 Sites of Local Significance within the Upper Perkiomen as priorities for biodiversity conservation. The Upper Perkiomen Valley supports the highest concentration of Natural Areas Inventory priority sites in all of Montgomery County and it is known to have populations of the smallest flowering plant in the world – watermeal, a member of the Duckweed Family. Watermeal is free-floating like duckweed (Lemna) but smaller. Two species of Wolffia (Wolffia brasiliensis and Wolffia columbiana) are part of our regional flora in Montgomery County. Below is a description of each of the areas highlighted in the National Resources Inventory within the proposed Upper Perkiomen Watershed as outlined in the Upper Perkiomen Watershed Conservation Plan.

- ***Indian Creek Floodplain*** – located in Upper Milford Township (Lehigh County)
- ***Hosensack Marsh*** –This Priority 1 site in Lehigh County is one of the highest-ranking wetlands in the Upper Perkiomen watershed. The marsh is noted for its combination of marsh and shrub swamp habitat, supporting a wide array of animal species of special concern (i.e. bog turtles).
- ***Lower Milford Marsh*** – This Lehigh County site supports a "Basin Graminoid-Forb Fen Natural Community" along the floodplain of Hosensack Creek. The northern section of this wetland includes seeps and springs, a marsh, and then a forested swamp. The southern portion gradually becomes marshy, and is densely

vegetated by grasses and sedges. Tree species noted in the Inventory include black walnut, willow, and ash, with herbaceous plants including sweetflag iris, sensitive fern and skunk cabbage. Several species of special concern are suspected at this site, both plants and animals.

- ***Big Beech Woods*** – This site, in Lower Milford Township, Lehigh County, is a southeast-facing slope along Hosensack Creek with a maturing second-growth forest of beech, tulip poplar, sugar maple, hickory, oak and birch. Some of the trees are measured at over 2 feet in diameter. Hemlock is also present in the understory along with a diversity of shrubs and a rich herbaceous layer. The Inventory also notes the importance of protecting this area to support the quality of Hosensack Marsh.
- ***Macoby Creek Ravine*** – A Priority 2 site in Montgomery County containing a large population of a state-listed rare plant species. Sugar maple, flowering dogwood and a variety of wildflowers are noted at this site adjacent to the quarry.
- ***Mill Hill Woods*** - A Priority 2 site in Montgomery County that consists of a large contiguous tract of woodland on the diabase ridge known as Mill Hill just north of Pennsburg in Upper Hanover and Lower Milford Townships. There may be seepage wetlands and at least two plant species of special concern at this site. At 600 feet, Mill Hill is the highest point in Montgomery County.
- ***Mill Hill*** – This wooded diabase ridge in the Hosensack Creek watershed in Lehigh County supports an extensive forested area with possible plant species of special concern. Beech, tulip poplar, sugar maple, basswood, ash, hickory, and oak are dominant species on lower slopes. Herbaceous plants are diverse, with numerous species of woodland wildflowers and ferns. The upper slopes are dominated by chestnut oak, sweet birch, tulip poplar, and red oak, with witch hazel, dogwood, choke-cherry and maple-leaved viburnum common in the shrub layer. A rich herbaceous plant community is present in the upper slopes. Upper Hanover Township has acquired the majority of the Montgomery County portion of the site as a protected area.
- ***New Goshenhoppen Meadows*** – A Priority 1 site of Montgomery County located on the northwest end of Green Lane reservoir supports a graminoid marsh with breeding habitat for rare wildlife species, and is frequented by a diversity of birds

and other animals. New Goshenhoppen Meadows adjoins the Perkiomen Creek just upstream from the Green Lane Reservoir, and also supports rare wildlife species and uncommon grassland nesting birds such as savannah sparrow, meadowlark and bobolink. The wet meadows contain a diversity of sedges and native wildflowers with good butterfly habitat.

- ***Church Road Floodplain*** – A Priority 2 locally significant floodplain forest with species such as silver maple, ash, and spicebush, with an adjoining upland woods supporting sugar maple, beech and hemlock along the Perkiomen Creek. This site adjoins the New Goshenhoppen Meadows. (This site is also part of the Audubon Important Bird Area)

Priority Habitat Zone in Schuylkill Watershed Conservation Plan

Natural Land Trust's *Smart Conservation* project combined 15 land cover classes and assigned them habitat potential ranging from very poor, poor, adequate to good for each of six taxa classes (i.e., mammals, birds, herpetofauna (i.e., reptiles and amphibians), invertebrates, plants and aquatics). A panel of regional experts and scientists assigned the habitat values. Each land cover class was weighted according to its assigned habitat value and the cumulative average habitat score for each taxa group was generated by subwatershed. A generalized habitat value map was produced, which incorporates the habitat values from each of the contributing taxa maps. The Upper Perkiomen was listed as a priority for conservation due to its habitat value and was one of twelve subwatersheds listed in the Schuylkill under this special value designation (see Appendix D for map).

Important Bird Areas –Global Significance for the Upper Perkiomen

Two designated Important Bird Areas adjoin the proposed upgrade area, Green Lane Reservoir and Unami Creek IBA. Green Lane Reservoir is designated an "Important Bird Area" by the National Audubon Society and its Ornithological Technical Committee made up of scientific advisors, which makes it one of only eighty sites throughout the entire Commonwealth (see Appendix D). These areas include migratory staging areas, winter roost sites and prime breeding areas for songbirds, wading birds, shorebirds, and other species. Birds documented using extensive mud flats in this area include twenty-seven shorebird species that are regular fall migrants. This is a major stop over for these birds traveling long distances during their migration. Bird species include: herons, egrets, gulls, terns, ducks,

osprey, American pipit, snowy egret, northern shoveler, eastern meadowlark. Savanna and grasshopper sparrows are known to nest in these areas. Bobolinks nest in similar habitat nearby in the Upper Perkiomen. Other species including mink, river otter, meadow vole, beaver, red-bellied turtle, and muskrat have also been documented in this area. Residents of Lower Milford Township have also observed bald eagles nesting and foraging in the Hosensack Watershed.

Government Protection

The majority of the Upper Perkiomen Watershed within all of Montgomery County, Douglass and Hereford in Berks County, Milford in Bucks County, and Lower Milford in Lehigh County, is designated a "Groundwater Protected Area" by the Delaware River Basin Commission.

The townships of the Upper Hosensack basin are currently in the process of updating and improving their natural resource ordinances and use of best management practices. This is being guided by a multi-municipal comprehensive plan which covers five adjacent municipalities. In Upper Milford Township, a complete natural resources ordinance review has just been completed, and the recommendations of that review are being implemented in the township's update of its Zoning Map and SALDO. Additional recommendations being implemented are significantly increased Erosion and Sedimentation control practices, a newly restrictive Act 167 ordinance which requires all stormwater to be treated by at least two best management practices, and a two-zone riparian buffer ordinance. In Lower Milford Township, a complete reworking of the Zoning Ordinance is being carried out presently by the Brandywine Conservancy; among the changes is expected to be significant riparian buffer protection. Additionally, Lower Milford Township is also carrying out a complete natural resource ordinance review, and is expected to adopt numerous protective measures later this winter and next spring, once the process is complete.

The Montgomery County Planning Commission is currently working with the Morris Arboretum in completing an update of the Montgomery County Natural Areas Inventory. Dr. Ann Rhoads, Morris Arboretum senior botanist stated in her letter of support for the petition, "These riparian areas and wetlands not only provide natural connections between

larger natural areas, they also are habitat for additional species of special concern including plants, birds, reptiles, and amphibians."

Conservation Easements and Open Space

As of the 2001 WCP, The Upper Perkiomen Watershed has an estimated 7,970 acres, or 8.6% of the watershed in protected open space lands in the form of agricultural easements (4.5% of watershed or 4,182 acres), privately preserved lands (.04% of watershed or 363 acres), and county parks (3.7% of watershed or 3,425 acres) (See Map in Appendix D). Montgomery and Lehigh County portions of the watershed have the largest areas protected under agricultural easements. These agricultural lands are designated as "Prime Agricultural Soils" which are rated by the Soil Surveys as being productive for a variety of row crops, hay grass, and pasture (See Appendix D).

A recent example, the Mill Hill Preservation Area, illustrates collaboration among the county, municipalities, the conservation community, and a local real estate broker that understood that preserved land enhances both quality of life and property values. Mill Hill Preservation Area consists of 516 acres of a steep rocky ridge in the northwestern corner of Montgomery County and Berks County. The approach to the high point in the County is through forest glades and the "surprisingly pristine Hosensack Creek corridor" and was preserved with a collaboration from Red Hill and East Greenville Boroughs, Upper Hanover Township, state farmland program funds, Montgomery County and Montgomery County Land Trust. Eight adjoining property owners also participated in this preservation effort (www.mclt.org/openspaces/millhill).

Restoration Projects

Since 2000, there have been at least 24 restoration projects implemented in the Upper Perkiomen by grass roots groups, landowners, and Montgomery County Conservation District with help from funding from Pennsylvania DEP Growing Greener Program and the Fish and Wildlife Service. Many of these restorations have been implemented in agricultural areas in the form of stream-fencing and buffer plantings while others in more developed areas focus on groundwater infiltration and better management of stormwater. Philadelphia Suburban Company (now Aqua America) also sponsored several restoration projects to help improve drinking water supply as they recognized the importance of these streams to the Green Lane Reservoir.

E6 (iv) The water is a surface water of exceptional recreational significance.

The West Branch Perkiomen Creek from SR1022 downstream to SR2069 and Unnamed Tributary 01455 (basin) are designated as Class "A" Wild Trout streams due to its high biomass of wild brown trout. The Hosensack Creek and Indian Creek also have populations of reproducing wild brook trout.

E6.b1.(v.) The water achieves a score of at least 92% (or its equivalent) using the methods and procedures described in subsection (a)(2)(i)(A) or (B) (listed below).

The water quality data for this region is one of the major backbones of this petition and petitioners were solicited by scientific data collectors including Stroud Water Research Center to submit a petition based on this water quality data for the area. Water quality and benthic macroinvertebrate studies performed by Stroud Water Research Center (See Appendix B and Disc 1 or visit www.stroudcenter.org) point to the very high water quality level and biotic diversity of the Upper Perkiomen Watershed. There was no single report available to the petitioners that calculated the integrated benthic macroinvertebrate score as expected under the above-listed qualifying criteria but data from Stroud can be obtained through John Jackson and on-line to be able to determine if the streams sampled meet a reference stream.

E6.b2. The water is a surface water of exceptional ecological significance.

Portions of the Upper Perkiomen have fish data available that shows the presence of wild trout populations in both the Hosensack and West Branch Perkiomen. The PA Fish and Boat Commission has designated the main stem West Branch Perkiomen Creek from SR1022 downstream to SR2069 and unnamed tributary 01455 as Class "A" Wild Trout Waters. See section E4 (bullet 10) for more details on fish populations.

Regions in the proposed upgrade area also have species of special concern including plants, birds, reptiles, and amphibians as indicated by Dr. Ann Rhoads senior botanist of Morris Arboretum and co-petitioner. Dr Rhoads is presently updating the Montgomery County Natural Areas Inventory and is strongly supporting this redesignation.

E7. A general description of the land use and development patterns in the watershed. Examples include the amount or percentage of public lands and the amount or percentage of various land use types.

Activities occurring on the land will have an impact on water quality. The Watershed Conservation Plan for the Upper Perkiomen Watershed developed in 2001 used aerial photographs to show that impervious cover of the Upper Perkiomen Watershed was very low (see below table). The work of the Center for Watershed Protection (CWP) in Ellicott City, MD, produced a widely recognized guide for managing urbanizing watersheds called "Rapid Watershed Planning Handbook" that includes the development of threshold amounts of imperviousness and subsequent stream impacts. It is generally thought that a stream is able to maintain biodiversity and channel stability when the surrounding watershed has less than a 10% impervious cover[vii].

Table 1: Impervious Cover by Sub-watershed (Upper Perkiomen WCP, 2001)

Sub-watershed of Upper Perkiomen	Impervious Cover Percentage
**Main Branch (above Green Lane Reservoir)	1.3%
Main Branch (below Green Lane Reservoir)	6.6%
**Northwest Branch	1.5%
**Hosensack Creek	0.9%
**Macoby Creek	2.5%
Unami Creek	2.1%
Deep Creek	0.4%

** areas within the proposed upgrade area. Others kept for comparison reasons

Furthermore, a 2001 riparian buffer analysis of southeastern Pennsylvania streams conducted by the Heritage Conservancy, concluded that 155 stream miles (69%) of the 226 miles of waterways in the Upper Perkiomen Creek watershed benefit from buffers of at least 50 feet of woodland on each side of the stream (a.k.a."Full Forest Buffer"). None of the sub-watersheds of the Upper Perkiomen had less than 50% "Full Forest Buffer". See highlighted sub-watersheds and their riparian buffer statistics within the proposed upgrade area below:

Table 2: Percent Forested Buffer in Upper Perkiomen Watershed

Sub-watershed	% Total in Full Forest Buffer
West Branch	67%
Macoby Creek	60%
Hosensack Creek	78%
Perkiomen – Upper Main Branch	53%

Finally, forest land, the best land cover condition for sustaining the quality and quantity of ground and surface water, ranks as the most dominant land use type, accounting for over 55% of the land in the Upper Perkiomen Watershed. This forest coverage is significantly higher than the average 35% of forest for most of the Piedmont forests in southeastern Pennsylvania. This is followed by agriculture, which makes up 35% of the land[viii]. See the table below from the 2001 WCP for more details:

Table 3: Land use based on land use mapping by EPA Regions 3 (WCD, 2001)

Land Use	Area (acres)	Percentage of Watershed
Deciduous Forest	40, 729	51.1%
Row crops	20,292	25.5%
Hay/pasture	8,226	10.3%
Mixed Forest	3,304	4.2%
Evergreen Forest	2,444	3.1%
Low-intensity developed	1,516	1.9%
Water	965	1.2%
Woody wetland	833	1.1%
High intensity commercial/industrial	587	0.7%
Emergent herbaceous wetland	265	0.3%
Other grass (lawns, parks, golf)	230	0.3%
High intensity residential	224	0.3%
Bare: quarries, strip mines, sand pits	60	0.1%

Streams throughout the Upper Perkiomen watershed are significantly less impacted by development than streams in the lower portions of the Perkiomen watershed and the majority of streams in southeastern Pennsylvania. The following section summarizes the surface water quality conditions of each stream in the Upper Perkiomen Valley.

E8. The names of all municipalities through which the watershed or segment flows, including an official contact name and address.

There are seventeen, townships, municipalities, and boroughs that are within or part of the proposed upgrade area. They include:

Lehigh County

Lee Lichtenwalner
Lower Macungie Twp.
3400 Brookside Road
Macungie, PA 18062
610-965-4343

Ellen Koplin
Lower Milford Twp.
7607 Chestnut Hill Road
Coopersburg, PA 18036
610-967-4949

Daniel DeLong
Upper Milford Twp.
5831 Kings Hwy South
P.O. Box 210
Old Zionsville, PA
18068
610-966-3223

Montgomery County
Stanley W. Seitzinger, Jr.
Upper Hanover Twp.
1704 Pillsbury Road
P.O. Box 27
East Greenville, PA
18041
215-679-4401

East Greenville Boro
206 Main Street
East Greenville, PA
18041
215-679-5194

Jeanne Hopkins
Pennsburg Boro
76 West 6th Street
Pennsburg, PA 18073
215-679-4546

Darlene Stoudt, Borough
Secretary
Red Hill Boro
Graver Ally & 4th Street
Red Hill, PA 18076
215-679-2040

Douglass Township
Peter J. Hiryak, Township
Manager
1320 E. Philadelphia Ave
Gilbertsville, PA 19525

Green Lane Borough
Midge Fulcher, Borough
Secretary
PO Box 514 Main Street
Green Lane, PA 18054

Marlborough Township
Paul Williams, Township
Manager
6040 Upper Ridge Road
Green Lane, PA 18054

Berks County
Douglass Township
Jennifer Bolognese,
Secretary/Treasurer
1068 Douglass Drive
Boyertown, PA 19512

Hereford Township
Patricia White,
Manager/Secretary
P.O. Box 225
Hereford, PA 18056

Washington Township
Sandra S. Moser,
Township Manager
PO Box 52 Barto Road
Barto, PA 19504

District Township
Susan Manwiller,
Secretary
202 Weil Rd
Boyertown, PA 19514

Bally Borough
Robert Moll,
Secretary/Manager
PO Box 217
425 Chestnut Street
Bally, PA 19503

Longswamp Township
Peter Evans, Township
Manager
PO Box 37 1112 State St.
Mertztown, PA 19539

Bucks County
Milford Township
Jeffrey A. Vey, Township
Manager
PO Box 86
Spinnerstown, PA 18968

E9. Locational information relevant to items 4-8 (except for contact names and addresses) displayed on a map or maps, if possible.

See Appendix D for Maps

Appendices

Appendix A: Co-Petitioner Letters of Support

Appendix B: Water Quality Data (including Disk 1)

Appendix C: Restoration Project List

Appendix D: Maps

Disk 1: Water Quality Data

Appendix A
Co-Petitioners in support of Upper Perkiomen Stream Upgrade

Landowners

Lance Tittle
Chuck, Teri and Wyatt Brumm
Thomas & Elizabeth Graber
Donald Moyer
George van Rossum (water quality monitor), East Greenville PA
Ruth & Martha Voorhees
Michael Kutz
Marguerite & Philip Fadil
Colleen Bechtel
Claire and Howard Shelly
Ed & Denise Lounsberry
Al Rood
Dave Worthington
Alton & Linda Wimmer
Laurence & Susan Karper
Linda & Dennis Weidemoyer
Winifred & Edward Jensen
Brian Barger
Justin T Smith
Holly Delaco-Smith
Karen Wright
Martha Cawley
Robert & Martha Holby
Randall Romig
Val Bertoia
Henry Stauffer, Palm PA
William Bander Sr., East Greenville PA
Terry Schmoyer, Palm PA
Mike Bradford, East Greenville PA
James Haines, East Greenville PA
Paul Shellaway, East Greenville PA
Stan Krazek, East Greenville PA
Russel Burd, East Greenville PA
Sharon Kachmar, East Greenville PA
John McDonnell, East Greenville PA
C. Vermmsch, East Greenville PA

Farmers

James Longacre – Longmeadow Farm
John Cox
Glenn Hoffman
Richard & Elizabeth Hate
Lawrence Kahler
Terry Ferrence
Richard & Merris Ann Hoffman

Organizations

Delaware Riverkeeper Network
Morris Arboretum of the University of Pennsylvania
Trout Unlimited, Perkiomen Valley Chapter #332
PA Council of Trout Unlimited
Perkiomen Watershed Conservancy
Upper Perkiomen Watershed Coalition
Clean Water Action
Lehigh Valley Group of the Sierra Club
Lehigh Valley Audubon Society
Green Valley Coalition
Ducks Unlimited
Pine Creek Valley Watershed Association
Stroud Water Research Center
Montgomery County Land Trust
League of Women Voters, Lehigh County
Wildlands Conservancy
The Lorax Foundation
Berks County Conservancy

Townships and Government

Representative Karen Beyer, 131st Legislative District
Hereford Township
Lehigh County Conservation District
Montgomery County Conservation District

Businesses

Securities America, Inc.
Fabricated Alloy Products, East Greenville
Wright Wine Works
Landhaven – Ed and Donna Proprietors
Bertoia Studios

LANCE M. TITTLE

7961 KINGS HIGHWAY
ZIONSVILLE PA 18092

September 15, 2006

Mr. Louis J. Wentz, President
Trout Unlimited
Perkiomen Valley Chapter
P.O.Box 730
Green Lane, PA 18054

Dear Mr. Wentz,

We are pleased to support your petition to change the designation of the Hosensack/Walters Creek watershed branches of the Perkiomen Creek from Cold Water Fishery to Exceptional Value (EV).

We agree that these waters should be given the utmost highest level of protection. This stream runs through our property. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs.

We hope that you will convey our support to the decision-making bodies.

Sincerely yours,

Lance M. & Linda Tittle

DATE: 8-26-06

Mr. Louis J. Wentz, President
Trout Unlimited
Perkiomen Valley Chapter,
P.O. Box 730
Green Lane, PA 18054

We are pleased to support your Petition to change the designation of Pachwechen Run/Valley Run from Coldwater Fishery (CWF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. This stream runs through our property. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Chuck, Teri, Wyatt Brumm
610-845-0608

Date 8/7/06

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Petitioner:

We are pleased to support your Petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Thomas Graber

Elizabeth Graber

Elizabeth Graber

Date 8/7/06

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Petitioner:

We are pleased to support your Petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Donald A Moyer

Donald Moyer

Diane Moyer

Diane Moyer

Maya K. van Rossum
Delaware Riverkeeper Network
300, Pond St.,, 2nd floor
Bristol PA 19007

George D.V. van Rossum, Ph.D.,
1085 Baus Rd.,
East Greenville PA 18041

10th Sept. 2006

RE : Redesignation of Upper Perkiomen Watershed as "Exceptional Value".

Dear Delaware Riverkeeper,

This letter is to support the application being made for up-grading the Upper region of the Perkiomen Creek to that of 'Exceptional Value'.

I have been a resident of the Upper Perkiomen watershed since 1994 and, more specifically reside in the watershed of the Macoby Creek – a tributary of the Perkiomen Creek. I am a member of both the Upper Perkiomen Watershed Coalition ('UPWC') and the Delaware Riverkeeper Network and for a number of years I have been a volunteer for monitoring chemical aspects of a single tributary of the Perkiomen, namely the Macoby Creek.

From 1994 to 2004 I made weekly measurements of pH and 'alkalinity' of the Macoby Creek on behalf of the Alliance for Acid Rain Monitoring (ALLARM) of Dickinson College (Carlisle PA). Since 2002 I have made monthly chemical assays at two sites on the main Macoby Creek - one close to the point at which three sub-branches of the upper creek come together ('site 1') to form the main stream, and the other close to the point ('site 2') at which the Macoby issues into the Green Lane Reservoir. Measurements include nitrate and phosphate which have consistently been at or (usually) well below the lowest concentration quantifiable by the colorimetric methods used (less than 0.2 mg/l Oxygen levels have been consistently at an average of 80% saturation and pH always close to 7.0.

All measurements have been consistently close to each other at the two sites despite differences in the terrain through which the water flows. Thus, the creek at the up-stream site has passed mainly through agricultural land, with some wooded areas, and housing development being sparse. The region traversed further downstream passes close to the three towns along route PA 29 and then through a zone of rapidly increasing housing development. Despite these differences, the measured aspects of water chemistry at the two sites have, with occasional exceptions (e.g. after some heavy rain storms) differed little from each other and represent water quality that likely meets that of other High Quality (HQ) streams

During the past two months, further observation points have been selected to make readings at each of the three main tributaries of the Macoby, all of which come together above site 1. These observation sites are all within half a mile of the origin of each tributary in the nearby highland region. In each case, the measurements of the three tributaries have, with one exception, been similar to each other and, notably, similar also to the data obtained at site 1 of the main Macoby Creek. The region of

origin of the three small tributaries is agricultural with some woodland. It is perhaps worth mentioning that several farms in that area are preserved under a program of Lehigh County. In general, the results indicate that the chemical observations on the Macoby Creek, from sources to mouth differ little.

The Macoby Creek is a smaller tributary of the Perkiomen than adjacent creeks, such as the Hosensack Creek and the main stream of the upper Perkiomen, but these all seem to arise and pass through similar terrain and conditions as the Macoby – suggesting perhaps that the water quality may be similar in each case.

The countryside of the Perkiomen and its tributaries is widely used for recreation of various types - fishing, hunting hiking, bicycling - and also supports wild life a notable example being the Hosensack Marsh which has been found to support a protected species of turtle. The water of the region is also an important source of domestic water; the Hosensack Creek supplies water to the town of East Greenville while the whole of the upper Perkiomen drainage system flows into the Green Lane Reservoir.

I respectfully suggest that the Upper Perkiomen as a whole is of great importance to the local economy and environment and deserves the highest degree of environmental protection that is available from the Commonwealth of Pennsylvania.

Yours respectfully

G.D.V. van Rossum, Ph.D.

Date 8/7/06

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Petitioner:

We are pleased to support your Petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Ruth Voorhees
Ruth Voorhees

Martha E. Voorhees
Martha Voorhees

Date 8/7/06

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Sirs:

We are pleased to support your Petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Michael C. Kiely

Date 8/7/06

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Petitioner:

We are pleased to support your Petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Marguerite Fadil

Philip Fadil

Date 8/8/06

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Sirs:

We are pleased to support your Petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Colleen Beckett

Mr. Louis Wentz
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Date: 8/8/2006

RE: Redesignation of Upper Perkiomen Creek Watershed as Exceptional Value

Dear Mr. Wentz

We currently work and live in the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. We strongly support re-designating the Upper Perkiomen Watershed and its tributaries (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA), including all of the associated tributaries, from the current designation to Exceptional Value.

We realize the importance of the stream for a variety of users as well as recognize the need for action to fully realize and secure the integrity of this valuable sub-watershed. This part of the Perkiomen headwaters, which serves as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania, has been host to numerous stream restoration projects by Perkiomen Trout Unlimited, Perkiomen Watershed Conservancy, the Delaware Riverkeeper network, associated community volunteers, and the cooperating landowners. The Upper Perkiomen is also a favorite fishing stream for many anglers that generates local tourism dollars for the region, who in turn, support local businesses. It also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, we strongly believe that there is solid documentation of data available that merit the action of a stream upgrade by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the upgrade petition. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support suggest the community strongly supports this action. The quality of life, which this sub-watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this matter.

Sincerely.

J. Howard Shelly
Claire D. Shelly

Claire & Howard Shelly
5801 Schultz Bridge Rd.
Zionsville, Pa

Landowner

Mr. Louis Wentz
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Date: 8/8/2006

RE: Redesignation of Upper Perkiomen Creek Watershed as Exceptional Value

Dear Mr. Wentz

We currently work and live in the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. We strongly support re-designating the Upper Perkiomen Watershed and its tributaries (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA), including all of the associated tributaries, from the current designation to Exceptional Value.

We realize the importance of the stream for a variety of users as well as recognize the need for action to fully realize and secure the integrity of this valuable sub-watershed. This part of the Perkiomen headwaters, which serves as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania, has been host to numerous stream restoration projects by Perkiomen Trout Unlimited, Perkiomen Watershed Conservancy, the Delaware Riverkeeper network, associated community volunteers, and the cooperating landowners. The Upper Perkiomen is also a favorite fishing stream for many anglers that generates local tourism dollars for the region, who in turn, support local businesses. It also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, we strongly believe that there is solid documentation of data available that merit the action of a stream upgrade by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the upgrade petition. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support suggest the community strongly supports this action. The quality of life, which this sub-watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this matter.

Sincerely.

Denise Lounsberry Edward Lounsberry

Ed & Denise Lounsberry
8183 Kings Hwy South
Coopersburg, Pa.

Landowner

Mr. Louis Wentz
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Date: 8/8/2006

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Sincerely.

Al Rood
5316 Schultz Bridge Rd.
Zionsville, Pa

Landowner

Mr. Louis Wentz
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Date: 8/8/2006

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Sincerely,

Dave Worthington
5125 Schultz Bridge Rd.
Zionsville, Pa

Landowner

Mr. Louis Wentz
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Date: 8/8/2006

RE: Redesignation of Upper Perkiomen Creek Watershed as Exceptional Value

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Sincerely.

Alton & Linda Wimmer
1004 Hosensack Rd.
Palm, Pa.

Landowner

Name: LAURENCE P. KARPER
SUSAN J. KARPER
Address: 6937 YEAKELS MILL ROAD
ZIONSVILLE, PA 18092

July 24, 2006

Crystal Gilchrist, Executive Director
Perkiomen Watershed Conservancy
1 Skippack Pike
Schwenksville, PA 19473

Dear Ms. Gilchrist:

We are pleased to support your Petition to change the designation of the *Perkiomen Creek* by our property from its current designation of HQ (Class A Wild Trout) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource that contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Susan J. Karper

Linda Weidemoyer
7410 Stein Rd
Zionsville, PA 18092

July 24, 2006

Crystal Gilchrist, Executive Director
Perkiomen Watershed Conservancy
1 Skippack Pike
Schwenksville, PA 19473

Dear Ms. Gilchrist:

We are pleased to support your Petition to change the designation of the *Perkiomen Creek* by our property from its current designation of HQ (Class A Wild Trout) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource that contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Donna Weidemoyer

Linda Weidemoyer

Name:
Address:

WINIFRED C. JENSEN
EDWARD JENSEN
1020 HILLCREST DR.
NESHANIC STATION, NJ 08853

July 24, 2006

Crystal Gilchrist, Executive Director
Perkiomen Watershed Conservancy
1 Skippack Pike
Schwenksville, PA 19473

Dear Ms. Gilchrist:

We are pleased to support your Petition to change the designation of the *Perkiomen Creek* by our property from its current designation of HQ (Class A Wild Trout) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource that contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Ed Jensen

Win Jensen

Name: Brian Barger
Address: 2002 Yerkes Mill Rd.
Zionsville PA 18092

July 24, 2006

Crystal Gilchrist, Executive Director
Perkiomen Watershed Conservancy
1 Skippack Pike
Schwenksville, PA 19473

Dear Ms. Gilchrist:

We are pleased to support your Petition to change the designation of the *Perkiomen Creek* by our property from its current designation of HQ (Class A Wild Trout) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource that contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Mr. Brian Barger

Justin T. Smith 88 Church Hill Road Barto, PA 19504
(610) 871-0593

Mr. Louis J. Wentz, President
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

August 30, 2006

Dear Mr. Wentz

We are pleased to support your Petition to change the designation of Pachwechen Run/Valley Run from Coldwater Fishery (CWF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. Our property has springs and ponds that flow into this stream.

We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Justin T. Smith

■ ***Holly Delaco-Smith*** 88 Church Hill Road Barto, PA 19504
(610) 871-0593

Mr. Louis J. Wentz, President
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

August 30, 2006

Dear Mr. Wentz

We are pleased to support your Petition to change the designation of Pachwechen Run/Valley Run from Coldwater Fishery (CWF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. Our property has springs and ponds that flow into this stream.

We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Holly Delaco-Smith

Martha Cawley
81 Stove Rd
Barto, PA 19504

August 30, 2006

Mr. Louis J. Wentz, President
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Dear Mr. Wentz

I am pleased to support your Petition to change the designation of Pachwechen Run/Valley Run from Coldwater Fishery (CWF) to Exceptional Value (EV). I agree that these waters should be given the highest level of protection. Although my 2 acre property does not have any water sources on it, I want to protect these valuable resources, which contain wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey my support to the decision-making bodies.

Sincerely,

Martha Cawley

Karen G. Wright
125 Church Hill Road
Barto, Pa. 19504

September 2, 2006

Mr. Louis J. Wentz, President
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Dear Mr. Wentz

We are pleased to support your Petition to change the designation of Pachwechen Run/Valley Run from Coldwater Fishery (CWF) to Exceptional Value (EV. We agree that these waters should be given the highest level of protection. Our property, woodlands and farmland totaling just under 50 acres, has springs and ponds which flow into this stream. We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Karen G. Wright

1578 Huffs Church Rd
Barto, PA 19504

DATE: 8-26-06

Mr. Louis J. Wentz, President
Trout Unlimited
Perkiomen Valley Chapter,
P.O. Box 730
Green Lane, PA 18054

We are pleased to support your Petition to change the designation of Pachwechen Run/Valley Run from Coldwater Fishery (CWF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. This stream runs through our property. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Robert C. Holby
Margaret Holby

RANDALL R. ROMIG
143 HIMMELWRIGHT ROAD
BARTO, PA 19504

DATE: 8-18-06

Mr. Louis J. Wentz, President
Trout Unlimited
Perkiomen Valley Chapter,
P.O. Box 730
Green Lane, PA 18054

We are pleased to support your Petition to change the designation of the West Branch of the Perkiomen below Old Route 100 from Trout Stocking Fishery to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. This stream runs through our property. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Randall R. Romig

Val Bertoia
Captain Wolfe Road
Barto, Pa. 19504

September 20, 2006

Mr. Louis J. Wentz, President
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Dear Mr. Wentz

We are pleased to support your Petition to change the designation of Pachwechen Run/Valley Run from Coldwater Fishery (CWF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. The Pachwechen flows through our property, woodlands and farmland totaling over 90 acres. We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Val Bertoia

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Sirs:

We are pleased to support your petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

HENRY S. STAUFFER
793 GRAVEL PIKE
P.O. BOX 295
PALM. PA 18070

Henry S. Stauffer

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Sirs:

We are pleased to support your petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

William Bender Sr.
5242 Wasser Rd.
E. Greenville Pa.
18041

William C Bender

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Sirs:

We are pleased to support your petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Terry Schmoyer
1016 Hosensack Road
Palm Pa 18070

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Sirs:

We are pleased to support your petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Mike E Brad Ford
9068 Kings Highway
East Greenville, PA. 18041
Mike E Bradford

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

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Sincerely,

JAMES HAINES
5286 KRAUSSDALE, RD.
EAST GREENVILLE, PA. 18041

James Haines

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

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Sincerely,

Paul Shellaway
5353 Krausdale Rd
East Greenville Pa

Paul Shellaway

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

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Sincerely,

STAN J. KRAJEK
2282 WARNER SCHOOL Rd.
EAST GREENVILLE Pa.

Stan J. Krajek

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

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Sincerely,

Russell Burd
1044 Krausdale Rd.
East Greenville PA 18041

Russell W. Burd

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

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Sincerely,

Sharon Kachmar
2299 Warner School Rd
East Greenville PA 18041
Sharon Kachmar

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Sirs:

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Sincerely,

John L. McDonnell
2288 Warner School Rd
East Greenville

August 31, 2006

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

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Sincerely,

C Vermisch
2305 Warren Sch
C. Vermisch

DATE: 8-18-06

Mr. Louis J. Wentz, President
Trout Unlimited
Perkiomen Valley Chapter,
P.O. Box 730
Green Lane, PA 18054

We are pleased to support your Petition to change the designation of the West Branch of the Perkiomen below Old Route 100 from Trout Stocking Fishery to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. This stream runs through our property. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

James B. Longacre

James B. Longacre
Longmeadow Farm
1389 Route 100
Barto, PA 19504

Name: JOHN COX
Address: SUNSET VIEW FARM
40 CREAMERY ROAD
BALLY, PA 19503

July 24, 2006

Crystal Gilchrist, Executive Director
Perkiomen Watershed Conservancy
1 Skippack Pike
Schwenksville, PA 19473

Dear Ms. Gilchrist:

We are pleased to support your Petition to change the designation of the *Valley Run* by our property from its current designation of Coldwater Fishery (CWF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource that contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Glenn E. Hoffman
1849 Huffs Church Rd.
Barto, PA 19504-8962

July 24, 2006

Crystal Gilchrist, Executive Director
Perkiomen Watershed Conservancy
1 Skippack Pike
Schwenksville, PA 19473

Dear Ms. Gilchrist:

We are pleased to support your Petition to change the designation of the *Pachwechen Run* by our property from its current designation of Coldwater Fishery (CWF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource that contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Nancy L. Hoffman
Glenn E. Hoffman

Date 8/4/06

Perkiomen Watershed Conservancy
Attn: Crystal Gilchrist
1 Skippack Pike
Schwenksville, PA 19473

Dear Sirs:

We are pleased to support your Petition to change the designation of the Macoby Creek from Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Richard L. Hate

Richard L. Hate

Elizabeth M. Hate

Elizabeth M. Hate

Name: Lawrence Kahler
Address: 225 Church Hill Rd
Barto PA. 19504
53 Kahler Rd

July 24, 2006

Crystal Gilchrist, Executive Director
Perkiomen Watershed Conservancy
1 Skippack Pike
Schwenksville, PA 19473

Dear Ms. Gilchrist:

We are pleased to support your Petition to change the designation of the *Pachwechen Run* by our property from its current designation of Coldwater Fishery (CWF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource that contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely, Lawrence G. Kahler

Terry Ferrence
119 Fetterman Rd.
Barto, PA 19504-8960

July 24, 2006

Crystal Gilchrist, Executive Director
Perkiomen Watershed Conservancy
1 Skippack Pike
Schwenksville, PA 19473

Dear Ms. Gilchrist:

We are pleased to support your Petition to change the designation of the *Perkiomen Creek* by our property from its current designation of Trout Stocking Fishery (TSF) to Exceptional Value (EV). We agree that these waters should be given the highest level of protection. We want to protect this valuable resource that contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Terry Ferrence

1811 Lesher Mill Road
Palm, PA 18070
September 25, 2006

Faith Zerbe
Delaware Riverkeeper Network
300 Pond Street, 2nd Floor
Bristol, PA 19007

We are pleased to support your Petition to change the designation of the Upper Perkiomen Watershed from its various current designations, to Exceptional Value (EV). Our business believes that a thriving business climate includes places where residents and businesses exist in environmentally protected areas, that increase property values and reflect high personal incomes. We agree that these waters should be given the highest level of protection. We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Thank you.

Sincerely,

Richard H. Hoffman

Merris Ann Hoffman

DELAWARE RIVERKEEPER®

December 8, 2006

To: The Honorable Kathleen McGinty, Chairperson
Environmental Quality Board
Rachel Carson State Office Building
15th Floor, PO Box 2063
400 Market St.
Harrisburg, PA 17105-2063

From: 84 businesses and landowners serving as co-petitioners/supporters of the petition

Delaware Riverkeeper Network, Perkiomen Valley Trout Unlimited, Lehigh County Conservation District, Montgomery County Conservation District, and Perkiomen Watershed Conservancy are jointly submitting this petition for upgrade of the Upper Perkiomen Creek. For administrative purposes, any correspondence about this petition can be directed to the Delaware Riverkeeper Network. Contact information for the five lead petitioners is as follows:

Delaware Riverkeeper Network
Maya van Rossum, the Delaware Riverkeeper
300 Pond Street, 2nd Floor
Bristol, PA 19007
Tel: 215-369-1188 ext 102

Perkiomen Valley Trout Unlimited #332
Jack Steel, Vice President
P.O. Box 730
Green Lane, PA 18054

Lehigh County Conservation District
Harold Hoppes, District Chairman
Lehigh County Agricultural Center
Suite 102
4184 Dorney Park Road
Allentown, PA 18104-5728
Tel: 610-391-9583 ext. 18

Perkiomen Watershed Conservancy
Crystal Gilchrist, Executive Director
1 Skippack Pike
Schwenksville, PA 19473
Tel: 610-287-9383

Montgomery County Conservation District
Richard Kadwill, District Manager
143 Level Road
Collegeville, PA 19426-3313
Tel: 610-489-4506

In addition to these five co-petitioners, there are 79 organizations, landowners, businesses, and local governments who are serving equally as co-petitioners/supporters for this petition to the Environmental Quality Board. They include the following entities and Appendix A provides letters from each of these co-petitioners.

Landowners

Lance Tittle
Chuck, Teri and Wyatt Brumm
Thomas & Elizabeth Graber
Donald Moyer
George van Rossum (water quality monitor), East Greenville PA
Ruth & Martha Voorhees
Michael Kutz
Marguerite & Philip Fadil
Colleen Bechtel
Claire and Howard Shelly
Ed & Denise Lounsberry
Al Rood
Dave Worthington
Alton & Linda Wimmer
Laurence & Susan Karper
Linda & Dennis Weidemoyer
Winifred & Edward Jensen
Brian Barger
Justin T Smith
Holly Delaco-Smith
Karen Wright
Martha Cawley
Robert & Martha Holby
Randall Romig
Val Bertoia
Henry Stauffer, Palm PA
William Bander Sr., East Greenville PA
Terry Schmoyer, Palm PA
Mike Bradford, East Greenville PA
James Haines, East Greenville PA
Paul Shellaway, East Greenville PA
Stan Krazek, East Greenville PA
Russel Burd, East Greenville PA
Sharon Kachmar, East Greenville PA
John McDonnell, East Greenville PA
C. Vermmsch, East Greenville PA

Farmers

James Longacre – Longmeadow Farm
John Cox
Glenn Hoffman

Richard & Elizabeth Hate
Lawrence Kahler
Terry Ferrence
Richard & Merris Ann Hoffman

Organizations

Delaware Riverkeeper Network
Morris Arboretum of the University of Pennsylvania
Trout Unlimited, Perkiomen Valley Chapter #332
PA Council of Trout Unlimited
Perkiomen Watershed Conservancy
Upper Perkiomen Watershed Coalition
Clean Water Action
Lehigh Valley Group of the Sierra Club
Lehigh Valley Audubon Society
Green Valley Coalition
Ducks Unlimited
Pine Creek Valley Watershed Association
Stroud Water Research Center
Montgomery County Land Trust
League of Women Voters, Lehigh County
Wildlands Conservancy
The Lorax Foundation
Berks County Conservancy

Townships and Government

Representative Karen Beyer, 131st Legislative District
Hereford Township
Lehigh County Conservation District
Montgomery County Conservation District

Businesses

Securities America, Inc.
Fabricated Alloy Products, East Greenville
Wright Wine Works
Landhaven – Ed and Donna Proprietors
Bertoia Studios

As you can see by this list, the support for upgrade of the Upper Perkiomen is genuine, strong and diverse. Representative Karen Beyer of the 131st Legislative District also supports this petition on behalf of her constituents and has hand delivered this petition to the Department. We have every expectation that support for the upgrade will continue to grow and expand throughout the public petition process.

Upgrading the Upper Perkiomen was first discussed by Stroud Water Research Center, an entity that has collected water quality data throughout the Schuylkill River Watershed and

that indicated to Delaware Riverkeeper Network and Perkiomen Valley Trout Unlimited the exceptional benthic community present in areas sampled in the Upper Perkiomen.

Petitioners gathered additional information and data which demonstrated a need for the waterway to be more appropriately designated and the region better protected in order to meet present water quality conditions. The Upper Perkiomen serves as drinking water supply and drains into Green Lane Reservoir, Montgomery County. There have been various reports, white papers, and studies done on this region because of its importance. A Watershed Conservation Plan was completed for the region in 2003, placing the Upper Perkiomen Creek Watershed on the Pennsylvania Rivers Conservation Registry administered by the Department of Conservation and Natural Resources.

Since 2000, there has been a heavy investment by the Commonwealth using Growing Greener funding and from other funding programs to implement at least 24 restoration projects in the Upper Perkiomen. These projects were made possible by state funding but also because of the local groups that work every day in this region to better restore and protect the watershed and the creek. Many of the restoration projects are being maintained on a regular basis. Benthic data being collected in proximity to these restoration projects show cleaner streams post-restoration. DEP investments in restoration are restoring streams and have helped protect and enhance the Upper Perkiomen. Upgrading the status of the Upper Perkiomen to its proper designation is an important recognition of the value of the Upper Perkiomen, of the region, of the residents, the DEP and the Commonwealth who have worked so hard to protect it, and it is the logical next step in protecting the investments we have all made in this watershed.

Our attached petition documents the data, the reasons and the rationales that support our request to upgrade the Upper Perkiomen to EV status. We look forward to working through this petition process and do not hesitate to contact me with any questions or concerns at 215-369-1188 ext. 102.

Respectfully Submitted,

Maya van Rossum
Delaware Riverkeeper
Delaware Riverkeeper Network

Morris Arboretum of the
University of Pennsylvania
Official arboretum of the Commonwealth of Pennsylvania

December 4, 2006

Maya van Rossum
Delaware Riverkeeper Network
300 Pond Street, 2nd Floor
Bristol, PA 19007

RE: Redesignation of Upper Perkiomen Watershed as Exceptional Value

Dear Maya:

Dr. Timothy Block and I are currently completing an update of the Montgomery County Natural Areas Inventory under a contract with the County Planning Commission. We have documented a number of significant tracts of open space in the Perkiomen Watershed of Upper Montgomery County including Mill Hill Woods, and other tracts preserved by Upper Hanover, Douglass, and Marlborough Townships.

The common thread in these areas is diabase geology, which has protected them from development; the feature that links them together physically is the Perkiomen, Hosensack, and Macoby Creek corridors. These riparian areas and wetlands not only provide natural connections between larger natural areas, they also are habitat for additional species of special concern including plants, birds, reptiles, and amphibians.

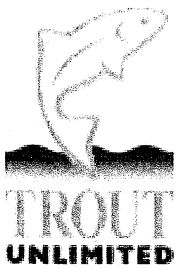
The extensive forested areas of Upper Montgomery County and adjacent portions of Berks and Lehigh Counties also provide habitat for forest interior birds and act as a source that supports bird diversity in surrounding landscapes. It is of note that two designated Important Bird Areas adjoin the site; the Green Lane Reservoir and Unami Creek IBAs.

We strongly support re-designating the Upper Perkiomen Creek Watershed (from the headwaters to where it enters the Green Lane Reservoir, near East Greenville, PA, including all of the associated tributaries, from the current designation of Cold Water Fishery and Trout Stocking Fishery to Exceptional Value. Exceptional value (EV) status would recognize the existing natural value of the watershed, and afford it further protection in the future.

Sincerely,

Ann F. Rhoads, PhD
Senior Botanist

100 Northwestern Avenue
Philadelphia, PA 19118
215-247-5777
FAX 215-248-4439
www.upenn.edu/morris



Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 339
Green Lane, PA 18054

Date: September 26, 2006

Honorable Kathleen A. McGinty, Chair
Environmental Quality Board
15th Floor, RCSOB
P.O. Box 8477
Harrisburg, PA 17105-8477

Dear Ms. McGinty,

I am writing on behalf of the 225 members of the Perkiomen Valley Chapter of Trout Unlimited, who live, work, or recreate within the Perkiomen Watershed. As a chapter that has been extremely active in the restoration of riparian corridors in the Upper Perkiomen Watershed, we are pleased to be among the co-petitioners for the upgrade of the Upper Perkiomen watershed.

Over the past ten years, the Perkiomen Vally TU chapter initiated 10 stream restoration projects, seven of which involved stream-bank fencing and three riparian buffer corridor plantings. Nine of these ten projects occurred on private lands, and exceeded 15,000 linear feet. Our work was assisted by partnering with other organizations (primarily the Perkiomen Watershed Conservancy and the Delaware Riverkeeper Network.), through funds obtained through the EPA 319 program and the PA DEP Growing Greener program. Our combined efforts have paid off, as evidenced by the 2005 Stroud Water Research Center Data (http://www.stroudcenter.org/schuylkill/basins/perkiomen.htm), which indicates that the upper Perkiomen has among the best water quality in Southeastern Pennsylvania. Moreover, this petition has the broad support of the community, with an extensive number of support letters provided by

landowners who hold properties along the streams submitted for upgrade, along with businesses, and organizations and municipalities in the surrounding region.

It is now up to the Environmental Quality Board to substantiate and codify what we know to be true, that the Upper Perkiomen Watershed is deserving of special protection.

Sincerely,

Louis J. Wentz

President, Perkiomen Valley TU

Cc: Sierra Club, Lehigh Valley Chapter
Perkiomen Watershed Conservancy
Lehigh County Conservation District
Delaware Riverkeeper Network

Pennsylvania Council of Trout Unlimited

Ken Undercoffer
1510 Village Road
Clearfield, PA 16830
kcoffer@pennswoods,net

August 9, 2006

Louis Wentz, President
Perkiomen Valley TU #332
P.O. Box 730
Green Lane, PA 18054

RE: Redesignation of Upper Perkiomen Watershed as Exceptional Value

Dear Mr. Wentz:

I am writing on behalf of the Pennsylvania Council of Trout Unlimited (PA TROUT) and its 12,000+ members, who recognize the importance of protecting one of the best watershed resources in Southeastern Pennsylvania. PA TROUT strongly supports re-designating the Upper Perkiomen Creek Watershed (from the headwaters to the mouth where it enters the Green Lane Reservoir), near East Greenville, PA, including all of the associated tributaries, from the current designations of Cold Water Fishery and Trout Stocking Fishery to Exceptional Value.

PA TROUT realizes the importance of the stream for a variety of users as well as recognizes the need for action to fully realize and secure the integrity of the Upper Perkiomen headwaters. These headwaters serve as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen is also a favorite fishing stream for many anglers that generates tourism dollars for the region and invests in businesses. It also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, PA TROUT strongly believes that there is solid documentation of data available that merit the action of a stream upgrade for Upper Perkiomen watershed by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the petition for an upgrade. In addition, many watershed partners have worked hard to gain support from municipalities and community

organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support suggest the community strongly supports this action. The quality of life, which the Upper Perkiomen watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this matter.

Sincerely,

Ken Undercoffer, President
Pennsylvania Council of Trout Unlimited

PERKIOMEN WATERSHED CONSERVANCY
Environmental Education · Watershed Stewardship · Conservation Programs·
1 Skippack Pike · Schwenksville, PA 19473
Ph: 610-287-9383 Fax: 610-287-923-7 www.perkiomenwatershed.org

Conserving and protecting the land and water resources of the Perkiomen Watershed through a commitment to and leadership in environmental education, watershed stewardship and conservation programs.

August 10, 2006

Maya van Rossum
Delaware Riverkeeper Network
300 Pond Street
Second Floor
Bristol, PA 19007

RE: Upper Perkiomen Creek
Exceptional Value Stream Petition

Dear Ms. Van Rossum,

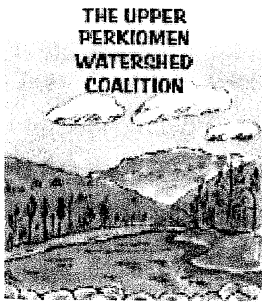
The Perkiomen Watershed Conservancy was established in 1964 to preserve and protect the land and water resources of the Perkiomen Creek watershed. Through the years, we have excelled at environmental education programming and creek bank restoration projects. All of our programming is aimed at increasing awareness of the exceptional resource value of the Perkiomen Creek and its environs and protecting it for future generations.

We are proud to support the current petition to upgrade the stream designation of the Upper Perkiomen Creek to Exceptional Value. While the EV designation will require expanded reviews of discharges from proposed land uses, it is our belief that the additional protections will help sustain and protect the environmental integrity of this largely rural area and improve conditions for agriculture and environmental tourism.

We have participated in this petition effort by soliciting letters of support and assisting with the coordination of the overall effort. We look forward to making the announcement that all reaches of the Perkiomen Creek above the Green Lane Reservoir are now protected for the exception environmental value they provide for the adjacent communities as well as those who reside downstream.

Very truly yours,

Crystal G. Gilchrist
Executive Director



Upper Perkiomen Watershed Coalition
P.O. Box 233
Palm, PA 18070-0233

September 10, 2006

Delaware Riverkeeper
Delaware Riverkeeper Network
300 Pond Street, Second Floor
Bristol, PA 19007

Dear Riverkeeper:

I am writing to you on behalf of the Upper Perkiomen Watershed Coalition (UPWC). UPWC is a citizen volunteer group dedicated to the environmental protection and enhancement of the watershed of the Perkiomen Creek upstream from the confluence of the Unami Creek and Perkiomen Creeks in Perkiomenville, PA. The Upper Perkiomen Watershed encompasses 144 square miles in 26 municipalities in 4 counties. It is the home over 50,000 people.

UPWC strongly supports your petition to upgrade the designation of the of the portion of the Upper Perkiomen Creek and its tributaries above the Green Lane Reservoir from "Cold water fishery and trout stocking fishery" to that of "Exceptional Value".

This portion of the Perkiomen Creek traverses a region which is at present principally rural, largely a mixture of forests and farms. The upper reaches pass through low-lying wetlands, at least one of which, the Hosensack Marsh, is known to support endangered species, most notably the protected bog turtle. The riparian buffers of the region provide valuable habitat for wildlife. The creek itself is used for recreation, especially fishing, and is the primary source of drinking water for East Greenville borough. The creek empties into the Green Lane reservoir, a major drinking water source for the customers of Aqua Pennsylvania.

Members of UPWC live and work within the Upper Perkiomen Watershed. The organization is well known within the watershed through its attendance and participation in local government meetings, educational presentations at local schools and through organization of our annual "Aqua Fair". Aqua Fair is a daylong event that brings together a variety of environmental conservation and historical groups, and students from local schools for the purpose of environmental education. UPWC, in partnership with the Pennsylvania Environmental Council and the Natural Lands Trust, using a grant from PA DCNR, developed a Rivers Conservation Plan for the Upper Perkiomen Watershed. The Upper Perkiomen Creek was added to the Pennsylvania Rivers Registry in June, 2003. Members of UPWC are also active in restoration and maintenance work on various branches of the Upper Perkiomen Creek, and in chemical monitoring of the creek on behalf of the Delaware Riverkeeper Network.

We believe that the Upper Perkiomen water quality data (physical, chemical, and biological) recently collected by the Stroud Water Research Center are solid scientific evidence of the extraordinary high quality of this stream. These data provide solid support for your petition to upgrade the designation of our creek. Furthermore, the complete set of supporting letters from a wide range of groups in the Upper Perk illustrate the strong local support for this petition.

The quality of life and environmental value of the Upper Perkiomen Watershed deserve the highest grade of protection that can be given by the Commonwealth of Pennsylvania: designation of the Upper Perkiomen Creek as an Exception Value stream.

The members and officers of UPWC appreciate your advocacy for this upgrade.

Sincerely,

James P. Walsh

James P. Walsh, PhD
President, Upper Perkiomen Watershed Coalition

CLEAN WATER ACTION

July 31, 2006

Maya van Rossum
Delaware Riverkeeper Network
P.O. Box 326
Washington Crossing, PA 18977

RE: Redesignation of Upper Perkiomen Watershed as Exceptional Value

Dear Ms. Rossum,

Clean Water Action (CWA) is a national citizens' organization working for clean, safe, affordable water, prevention of health threatening pollution, creation of environmentally safe jobs and businesses, and empowerment of people to make democracy work. We believe that a healthy watershed is integral to community health. Throughout Pennsylvania, we advocate for the most protective designated uses for streams and aquatic habitat.

In the Perkiomen watershed alone, Clean Water Action has over 4,000 members. These citizens have expressed their desire for clean, protected rivers and streams. Clean Water Action strongly supports re-designating the Upper Perkiomen Creek Watershed from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA, including all of the associated tributaries, from the current designation of Cold Water Fishery and Trout Stocking Fishery to Exceptional Value.

Clean Water Action realizes the importance of the stream for a variety of users as well as recognizes the need for action to fully realize and secure the integrity of the Upper Perkiomen headwaters. These headwaters serve as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen is also a favorite fishing stream for many anglers that generates tourism dollars for the region and invests in businesses. It also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, Clean Water Action strongly believes that there is solid documentation of data available that merit the action of a stream upgrade for Upper Perkiomen watershed by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the petition for an upgrade. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support, the community strongly supports this action. The quality of life, which the Upper Perkiomen watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania.

Sincerely,

Alisha Deen-Steindler
Eastern Pennsylvania Director

1124 Tilghman Street, Allentown, PA 18102 ■ (610) 434-9223 ■ FAX (610) 434-5790
100 N. 17th Street, Suite 900, Philadelphia, PA 19103 ■ (215) 640-8800 ■ FAX (215) 640-0930
100 Fifth Avenue, Suite 1108, Pittsburgh, PA 15222 ■ (412) 765-3053 ■ FAX (412) 765-1737
4455 Connecticut Avenue NW, Suite A300, Washington, DC 20008-2328 ■ (202) 895-0420 ■ FAX (202) 895-0438

June 28, 2006

Mr. Louis Wentz
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

RE: Redesignation of Upper Perkiomen Creek Watershed as Exceptional Value

Dear Mr. Wentz,

I am writing on behalf of the Lehigh Valley Group of the Sierra Club and its nearly 1500 members who work and live in the Lehigh Valley. We strongly support the petition to re-designate this stream and other streams of the Upper Perkiomen Watershed as Exceptional Value. The Hosensack Creek, Lower Milford Township in southwestern Lehigh County, is particularly special in that it has been found to have excellent quantity and diversity of macroinvertebrates and a rating of good water quality (Stroud Water Research Center). This qualifies it as an exceptional value stream worthy of special protection.

The Lehigh Valley Group of the Sierra Club realizes the importance of the stream for a variety of users and the need for action to fully realize and secure the integrity of this valuable sub-watershed. This part of the Perkiomen headwaters serves as a drinking water supply, is a favorite fishing stream for many anglers, and generates local tourism dollars for the region. It also contains many valuable habitats along its riparian buffer including species of special concern and areas of statewide significance (April, 1999, Natural Areas Inventory).

Our organization eagerly joins a list of watershed partners (municipalities, community organizations, landowners, and other concerned citizens) in supporting the re-designation of streams of the Upper Perkiomen Watershed. We thank you for your time and attention to this matter.

Sincerely.

Alisa Bauman, Chair
Lehigh Valley Group of the Sierra Club

Maya van Rossum
Delaware Riverkeeper Network
P.O. Box 326
Washington Crossing, PA 18977

7/18/06

RE: Redesignation of Upper Perkiomen Watershed as Exceptional Value

Dear Maya:

I am writing on behalf of the Lehigh Valley Audubon Society and its 1100 members, who work and live throughout the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. Lehigh Valley Audubon strongly supports re-designating the Upper Perkiomen Creek Watershed (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA, including all of the associated tributaries, from the current designation of Cold Water Fishery and Trout Stocking Fishery to Exceptional Value.

Lehigh Valley Audubon realizes the importance of the stream for a variety of users as well as recognizes the need for action to fully realize and secure the integrity of the Upper Perkiomen headwaters. These headwaters serve as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen is also a favorite fishing stream for many anglers that generates tourism dollars for the region and invests in businesses. It also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, Lehigh Valley Audubon Society strongly believes that there is solid documentation of data available that merit the action of a stream upgrade for Upper Perkiomen watershed by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the petition for an upgrade. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support, the community strongly supports this action. The quality of life, which the Upper Perkiomen watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this matter.

Sincerely.

Jon Levin
Vice-president Lehigh Valley Audubon Society

GREEN
VALLEY
COALITION

Maya van Rossum
Delaware Riverkeeper Network
P.O. Box 326
Washington Crossing, PA 18977

August 31, 2006

RE: Redesignation of Upper Perkiomen Watershed as Exceptional Value

Dear Maya:

I am writing on behalf of the Green Valley Coalition and its members, many of whom work and live in the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. The Green Valley Coalition strongly supports re-designating the Upper Perkiomen Creek Watershed (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA, including all of the associated tributaries) from the current designation of Cold Water Fishery and Trout Stocking Fishery to Exceptional Value.

The Green Valley Coalition realizes the importance of the stream for a variety of users as well as recognizes the need for action to fully realize and secure the integrity of the Upper Perkiomen headwaters. These headwaters serve as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen is also a favorite fishing stream for many anglers that generates tourism dollars for the region and invests in businesses. It also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, the Green Valley Coalition strongly believes that there is solid documentation of data available that merit the action of a stream upgrade for Upper Perkiomen watershed by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the petition for an upgrade. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support, the

community strongly supports this action. The quality of life, which the Upper Perkiomen watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this matter.

Sincerely.

Diana Hill, Chair, Board of Directors
Green Valley Coalition

DUCKS UNLIMITED
GREAT LAKES/ATLANTIC REGIONAL OFFICE

Grace E. Bottitta
Manager of Conservation Programs, Mid Atlantic Field Office
gbottitta@ducks.org

34 Defense Street, Suite 200, Annapolis, MD 21401 (410) 224-6620, Fax (410) 224-2077

Honorable Kathleen A. McGinty, Chairman
Environmental Quality Board
15th Floor, RCSOB
P.O. Box 8477
Harrisburg, PA 17105-8477

Date: July 28 ,2006

RE: Redesignation of Hosensack Creek Watershed as Exceptional Value

Dear Ms. McGinty:

I am writing on behalf of the Ducks Unlimited and its members who work and live throughout the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. Ducks Unlimited strongly supports re-designating the Hosensack Creek Watershed (from the headwaters to the mouth where it enters the Perkiomen, near Palm, PA), including all of the associated tributaries, from the current designation of Cold Water Fishery to Exceptional Value.

Ducks Unlimited realizes the importance of the stream. This stream is part of the Perkiomen headwaters, which serves as a drinking water supply for the residents of East Greenville. The watershed also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, Ducks Unlimited joins the many watershed partners that have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support suggest the community strongly supports this action. The quality of life, which the Hosensack Creek watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this matter.

Sincerely.

Grace E. Bottitta
Manager of Conservation Programs, Mid Atlantic
Ducks Unlimited

THE PINE CREEK VALLEY
WATERSHED ASSOCIATION, INC.
P.O. Box 239
Oley, PA 19547

September 5, 2006

Mr. Louis Wentz
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

RE: Redesignation of Upper Perkiomen Creek Watershed to Exceptional Value

Dear Mr. Wentz:

For twenty years now, the Pine Creek Valley Watershed Association ("Pine Creek") has worked to preserve and protect the open space, forested land, and watershed areas of southeastern Pennsylvania. It has gained a well-deserved reputation as a staunch and unrelenting defender of the resources of its community. Pine Creek has worked toward the upgrading of its own stream basin, designated as Exceptional Value in its entirety, and the Bieber Creek Watershed (also to Exceptional Value), both tributaries to the Manatawny Creek. It has also worked toward the upgrading of the Oysterville Watershed and the Upper West Branch of the Perkiomen to Exceptional Value. Under the auspices of two Growing Greener Grants, Pine Creek has prepared watershed protection plans for the Pine Creek Watershed and the Oysterville Creek Watershed.

Pine Creek strongly supports re-designating the Upper Perkiomen Watershed and its tributaries (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA) from the current designation to Exceptional Value. The Upper Perkiomen has been host to numerous stream restoration projects by Perkiomen Trout Unlimited, Perkiomen Watershed Conservancy, the Delaware Riverkeeper network, associated community volunteers, and the cooperating landowners. The Upper Perkiomen is also a favorite fishing stream for many anglers who generate local tourism dollars for the region, thereby supporting local businesses. The Upper Perkiomen also contains many valuable habitats along its riparian buffer, including species of special concern. Pine Creek realizes the importance of the stream for a variety of users, and it recognizes the need to protect the integrity of this valuable sub-watershed.

Most importantly, Pine Creek strongly believes that there is solid documentation of data available that merits the action of a stream upgrade by the Stroud Water Research Center. These sources of data provide a body of physical, chemical, and biological evidence that supports the petition for upgrading. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed.

The quality of life, which this sub-watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania.

Thank you for your time and consideration of this matter.

With best regards, I remain

Sincerely,

Ingrid E. Morning,
President and
General Counsel

2

STROUD
WATER RESEARCH CENTER

1 August 2006

Honorable Kathleen A. McGinty
Environmental Quality Board
15th Floor, RCSOB
P.O. Box 8477
Harrisburg, PA 17105-8477

RE: Designation of the Upper Perkiomen and Hosensack Creeks as Exceptional Value

I am writing this letter in support of the effort to upgrade the stream designation of the Upper Perkiomen/Hosensack Creek watershed from Cold Water Fishery to Exceptional Value. The Stroud Water Research Center has been using stream macroinvertebrates to monitor stream conditions at over 116 locations in the Schuylkill River basin since 1996. This now includes 37 sites in the Perkiomen Creek watershed. These are distributed across all of the major tributaries (i.e., Swamp, West Branch, Upper, Hosensack, Unami, East Branch, and Skippack). One site (on the West Branch just upstream of the Green Lane reservoir) is one of 19 sites that we have sampled annually since 1996. This site is consistently one of the best sites we sample and clearly deserving of the Exceptional Value status awarded in 1997. We use this site as a reference unimpaired stream. Another nearby site that we sample annually is on the mainstem of Perkiomen Creek just upstream of the Green Lane Reservoir. This is the 5th best site we sample annually. In 2005 and 2006, we added a total of six additional sites (2 in 2005, 4 in 2006) on the tributaries of the mainstem of Perkiomen Creek upstream of the Green Lane Reservoir. The two sites we sampled in 2005 were the 2nd (Hosensack Creek) and 4th (mainstem of Upper Perkiomen Creek) best of the 38 sites we examined that year – both had scores that were greater than at the Exceptional Value site on the West Branch in 2005. The four sites we sampled in 2006 were the 1st (Indian Creek), 4th (headwaters of Upper Perkiomen Creek), 7th (West Branch Hosensack Creek), and 11th (East Branch Hosensack Creek) best of the 39 sites we examined that year – all had scores that were better than at the Exceptional Value site on the West Branch in 2006. Details for the 2005 sites are available at www.stroudcenter.org/schuylkill, and we hope to have the 2006 data available soon.

Based on our 2005 and 2006 data, Upper Perkiomen and Hosensack Creeks support a wide variety of macroinvertebrates that are indicative of clean water and good habitat, and comparable to those found in the Exceptional Value section of the West Branch of Perkiomen Creek. These streams are excellent examples of healthy streams in southeastern Pennsylvania – many streams in this region have been impacted by years of development and use, including in neighboring tributaries of Perkiomen Creek (e.g., Skippack Creek or Swamp Creek). Every effort should be made to protect Upper Perkiomen and Hosensack Creeks from this fate as they represent a wonderful natural resource that will be viewed as a tremendous cultural and environmental asset by future generations. Elevating the stream designation to Exceptional Value will provide local landowners and municipal officials with another planning tool needed to help protect the watershed.

Sincerely,

John K. Jackson

John K. Jackson, Ph.D.
Associate Research Scientist

970 SPENCER ROAD • AVONDALE • PENNSYLVANIA • 19311-9514
PHONE 610 268 2153 • FAX 610 268 0490
www.stroudcenter.org

Montgomery County Lands Trust

a non profit conservancy

Maya van Rossum
Delaware Riverkeeper Network
P.O. Box 326
Washington Crossing, PA 18977

August 15, 2006

RE: Re-designation of Upper Perkiomen Watershed as Exceptional Value

Dear Maya:

I am writing on behalf of the Montgomery County Lands Trust concerning the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. Montgomery County Lands Trust strongly supports re-designating the Upper Perkiomen Creek Watershed from the current designation of Cold Water Fishery and Trout Stocking Fishery to an upgraded designation of **Exceptional Value** starting at its headwaters and extending to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA. This new designation should include all of the Upper Perkiomen's associated tributaries.

Montgomery County Lands Trust realizes the importance of the stream for a variety of users. It also fully recognizes the need for action to fully realize and secure the integrity of the Upper Perkiomen, its headwaters, and its tributaries. These waters serve as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen is also a favorite fishing stream for many anglers that generates tourism dollars for the region which help support many of the businesses in the region. The Perkiomen also contains many valuable habitats, including species of special concern, along its riparian corridor.

Most importantly, Montgomery County Lands Trust strongly believes that there is solid documentation of data available that merit the action of a stream upgrade for Upper Perkiomen watershed by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the petition for an upgrade. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that are located within this watershed. As you will see from the petition, list of co-petitioners, and letters of support, the community strongly supports this

Box 300 • Lederach, Pennsylvania 19450-0300
215-513-0100 • fax: 215-513-0150 • website: www.mclt.org • e-mail: info@mclt.org

action. The quality of life, which the Upper Perkiomen watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We strongly urge you to consider this re-designation to Exceptional Value.

Sincerely,

John W. Lea

John W. Lea
Director of Land Preservation
Montgomery County Lands Trust

LEAGUE OF WOMEN VOTERS OF LEHIGH COUNTY
P. O. BOX 3275
ALLENTOWN, PA 18106
610-432-1456

August 30, 2006

Ms. Maya van Rossum
Delaware Riverkeeper Network
P.O. Box 326 Washington Crossing, PA 18977

RE: Redesignation of Upper Perkiomen Watershed as Exceptional Value

Dear Ms. Van Rossum:

I am writing on behalf of the League of Women Voters of Lehigh County and its 80 members who work and live throughout the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. Our League strongly supports re-designating the Upper Perkiomen Creek Watershed from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA, including all of the associated tributaries, from the current designation of Cold Water Fishery and Trout Stocking Fishery to Exceptional Value.

The League of Women Voters of Lehigh County realizes the importance of the stream for a variety of users as well as recognizes the need for action to fully realize and secure the integrity of the Upper Perkiomen headwaters. These headwaters serve as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen is also a favorite fishing stream for many anglers that generates tourism dollars for the region and invests in businesses. It also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, the League of Women Voters of Lehigh County strongly believes that there is solid documentation of data available that merit the action of a stream upgrade for Upper Perkiomen watershed by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the petition for an upgrade. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support, the community strongly supports this action. The quality of life, which the Upper Perkiomen watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this matter.

Sincerely,
Mary Anne Rood, President
Mary Anne Stinner, Action Chair

Wildlands Conservancy

November 9, 2006

Maya van Rossum
Delaware Riverkeeper Network
300 Pond Street, 2nd Floor
Bristol, PA 19007

RE: Re-designation of Upper Perkiomen Watershed as Exceptional Value

Dear Maya:

On behalf of Wildlands Conservancy, its members and its constituents, I am writing to express our strong support for the re-designation of the Upper Perkiomen Creek Watershed (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA, including all associated tributaries), from the current designation of Cold Water Fishery and Trout Stocking Fishery to Exceptional Value.

As the largest sub-watershed of the Schuylkill River system, Wildlands Conservancy recognizes the importance of this stream for a variety of users, as well as the need for action to fully realize and secure the integrity of the Upper Perkiomen headwaters. These headwaters serve as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen watershed provides a highly valued fishery for many anglers who generate tourism dollars for the region and invests in its businesses. It also contains many valuable habitats along its riparian buffer, including species of special concern.

It has been brought to Wildlands Conservancy's attention that the Stroud Water Research Center has gathered physical, chemical, and biological data necessary to merit the upgrade of the Upper Perkiomen watershed. Local community support for the protection of this watershed has also been made evident to Wildlands Conservancy through strong interest in land and watershed protection activities expressed to our organization by several landowners within this region. It is also quite evident that many watershed partners have worked hard to gain the support of municipalities, community organizations and landowners living within the watershed.

Wildlands Conservancy strong supports the re-designation of the Upper Perkiomen Creek Watershed so that the quality of life that it now provides is given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this important matter.

Sincerely,

Brian J. Vadino
Director of Rivers Program

3701 Orchid Place, Emmaus, Pennsylvania 18049-1637
610-965-4397 • Fax 610-965-7223 • www.wildlandspa.org
E-mail: info@wildlandspa.org

The Lorax Foundation

Mr. Louis Wentz
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Date: September 1, 2006

RE: Redesignation of Upper Perkiomen Creek Watershed as Exceptional Value

Dear Mr. Wentz

I am writing on behalf of the The Lorax Foundation and it members, officers, directors and other constituents who work and live throughout the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. The Lorax Foundation advocates preservation of farmland, woodlands, wetlands, and watershed resources. We are a group of local property owners, citizens, family members and friends who are enthusiasts of the Butter Valley which is generally the area south of the Village of Hereford and north of Bally . The Lorax Foundation strongly supports re-designating the Upper Perkiomen Watershed and its tributaries (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA), including all of the associated tributaries, from the current designation to Exceptional Value.

The Lorax Foundation realizes the importance of the stream for a variety of users as well as recognizes the need for action to fully realize and secure the integrity of this valuable sub-watershed. This part of the Perkiomen headwaters serves as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen has been host to numerous stream restoration projects by Perkiomen Trout Unlimited, Perkiomen Watershed Conservancy, the Delaware Riverkeeper network, associated community volunteers, and the cooperating landowners. The Upper Perkiomen is also a favorite fishing stream for many anglers which generates local tourism dollars for the region, which in turn, supports local businesses. The Upper Perkiomen also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, The Lorax Foundation strongly believes that there is solid documentation of data available developed by the Stroud Water Research Center that merit the action of a stream upgrade. These data sources provide a body of physical, chemical, and biological evidence that supports the upgrade petition. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support, the community strongly supports this action. The quality of life, which this sub-watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. We appreciate your time and attention to this matter.

Sincerely.

Karen Wright

Karen Wright
President, The Lorax Foundation

KAREN D. BEYER, MEMBER
131ST LEGISLATIVE DISTRICT

ROOM G-32 IRVIS OFFICE BUILDING
HOUSE BOX 202020
HARRISBURG, PENNSYLVANIA 17120-2020
PHONE: (717) 783-1673
FAX: (717) 787-9463

DISTRICT OFFICE
2851 SOUTH PIKE AVENUE, SUITE C
ALLENTOWN, PENNSYLVANIA 18103
PHONE: (610) 791-6270
FAX: (610) 791-6274

E-MAIL: kbeyer@pahousegop.com
WEBSITE: www.repbeyer.com

HOUSE OF REPRESENTATIVES
COMMONWEALTH OF PENNSYLVANIA
HARRISBURG

COMMITTEES:

EDUCATION
GAME & FISHERIES
MAJORITY POLICY
URBAN AFFAIRS
VETERANS AFFAIRS & EMERGENCY PREPARDNESS

November 9, 2006

Kathleen McGinty
Secretary
Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063

RE: Redesignation of Upper Perkiomen Watershed as Exceptional Value

Dear Secretary McGinty: Katie :

Please accept this correspondence on behalf of the residents of the 131st Legislative District who work and live throughout the Perkiomen Watershed, the largest sub-watershed of the Schuylkill River system. I strongly support re-designating the Upper Perkiomen Creek Watershed (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA, including all of the associated tributaries) from the current designation of Cold Water Fishery and Trout Stocking Fishery to *Exceptional Value*.

As the State Representative in this area, I realize the importance of the stream for a variety of users, as well as recognize the need for action to secure the integrity of the Upper Perkiomen headwaters. These headwaters serve as a drinking water supply for the residents of East Greenville, and the Green Lane Reservoir, operated by Aqua Pennsylvania. The Upper Perkiomen Watershed is also a favorite fishing stream for many anglers and generates tourism dollars for the region. It also contains many valuable habitats along its riparian buffer, including species of special concern.

Most importantly, I believe that there is solid documentation of data available that merit the action of a stream upgrade for Upper Perkiomen Watershed by the Stroud Water Research Center. These data sources provide a body of physical, chemical, and biological evidence that supports the petition for an upgrade. In addition, many watershed partners have worked hard to gain support from municipalities and community organizations that live within this watershed. As you will see from the petition, list of co-petitioners, and letters of support, the community strongly supports this action. The quality of life, which the Upper Perkiomen Watershed now provides, should be given the highest protection offered by the Commonwealth of Pennsylvania. I appreciate your time and attention to this matter.

Sincerely,

Karen D. Beyer

KAREN D. BEYER
State Representative
131st Legislative District

HEREFORD TOWNSHIP
Board of Supervisors
Berks County, Pennsylvania
P.O. Box 225
Hereford, PA 18056
(610) 845-2929
Fax (610) 845-0616
E-Mail – pwhite@herefordtwp.berksco.org

Keith J. Masemore
Chairman

John G. Membrino
Vice-Chairman

Karla T. Dexter
Supervisor

September 5, 2006

Mr. Lou Wentz
Perkiomen Valley Trout Unlimited
Green Lane, PA 18054

Dear Mr. Wentz:

Realizing the importance of protecting the water resources within or owned by the Township of Hereford, on August 15, 2006 the Board of Supervisors of the Township of Hereford agreed to support the petition to upgrade the Upper Perkiomen Creek and its tributaries to "Exceptional Value" as is being submitted by Perkiomen Valley Trout Unlimited and its co-petition partners.

Very truly yours,

HEREFORD TOWNSHIP BOARD OF SUPERVISORS

Chairman

Vice-Chairman

Supervisor

RESOLUTION No. 7-06

A RESOLUTION IN SUPPORT OF PROTECTING THE WATER RESOURCES OF THE HOSENSACK CREEK.

WHEREAS, realizing the importance of protecting the water resources within or owned by the Borough of Pennsburg,

WHEREAS, the Perkiomen Valley Trout Unlimited and its co-petition partners will petition to upgrade the Hosensack Creek to Exceptional Value,

NOW, THEREFORE, BE IT ENACTED AND RESOLVED by Pennsburg Borough Council to agree to support the petition of Perkiomen Trout Unlimited to upgrade Hosensack Creek to Exceptional Value.

ENACTED AND RESOLVED this 7th day of August, 2006.

PENNSBURG BOROUGH COUNCIL

BY: _____ Pres.
President

ATTEST: Jeanne W. Hopkins
Secretary

Approved this 7th day of August, A.D., 2006.

_____
Mayor

Lehigh County Conservation District

Lehigh County Agricultural Center, Suite 102
4184 Dorney Park Road, Allentown, PA 18104 - 5728
Telephone (610) 391-9583
FAX (610) 391-1131

Maya van Rossum
Delaware Riverkeeper Network
300 Pond Street, 2nd Floor
Bristol, PA 19007

November 9, 2006

RE: Redesignation of Upper Perkiomen Watershed to Special Protection Waters

Dear Maya:

I am writing on behalf of the Lehigh County Conservation District. Over the past year, the District staff has worked with a number of partners to help compile and submit a petition to the Evironmental Quality Board of the Pennsylvania Department of Environmental Protection. The petition requests the PADEP to upgrade the designation of the Upper Perkiomen Watershed from Cold Water Fishery to High Quality Cold Water Fishery, or Exceptional Value, as the data warrants.

While the petition addresses the entire Upper Perkiomen Watershed, the Lehigh County Conservation District Board is particularly concerned with the portion of the watershed in Lehigh County, primarily the Hosensack Watershed. Current macroinvertebrate data from Stroud Water Research clearly supports the upgrade to Special Protection status, as does chemical water quality data. The land use in the Hosensack Watershed, while still largely rural, is experiencing increasing suburban residential development pressure. Upgrading the status of the watershed will ensure that the maximum protection against water quality degredation is afforded to the area as development increases. Further, as the adjacent watershed areas of the Perkiomen Creek Headwaters are already designated as HQ-CWF, an upgrade will bring the Hosensack Watershed into the same protection status as the other headwater sections nearby.

Therefore, the Lehigh County Conservation District Board of Directors voted at their November 9, 2006 meeting, to support the petition for an upgrade of the Hosensack Watershed and the additional watershed areas of the Upper Perkiomen Creek. The Board supports the designation of Exceptional Value if the Department's findings warrant it.

Sincerely,

Harold Hoppes

Harold Hoppes District Chairman
Lehigh County Conservation District

MONTGOMERY COUNTY
CONSERVATION DISTRICT

143 Level Road • Collegeville, PA 19426-3313 • 610-489-4506 • Fax: 610-489-9795
www.montgomeryconservation.org

September 18, 2006

Maya van Rossum
Delaware Riverkeeper Network
P.O. Box 326
Washington Crossing, PA 18977

RE: Redesignation of Upper Perkiomen Watershed as Exceptional Value

Dear Maya:

At the regularly scheduled public Board of Directors meeting of the Montgomery County Conservation District on September 12, 2006, the board concurred with the petition for the redesignation of the Upper Perkiomen Watershed to Exceptional Value.

Montgomery County Conservation District strongly supports the upgrade of the Upper Perkiomen Creek Watershed (from the headwaters to the mouth where it enters the Green Lane Reservoir, near East Greenville, PA, including all of the associated tributaries) from the current designation of Cold Water Fishery and Trout Stocking Fishery to Exceptional Value.

Montgomery County Conservation District recognizes the importance of the health of the Creek for its variety of users, as well as the need for action to fully realize and secure the integrity of the Upper Perkiomen headwaters. The Upper Perkiomen watershed provides drinking water for Montgomery County residents, a healthy environment for aquatic life, and recreational opportunities for residents. Preserving the headwaters of the Upper Perkiomen will not only contribute to water quality improvements in the Upper Perkiomen watershed, but the benefits will continue downstream through the Perkiomen Creek in Montgomery County.

Montgomery County Conservation District has reviewed the documentation of data available that merit the action of a stream upgrade for Upper Perkiomen watershed by the Stroud Water Research Center. These data sources provide physical, chemical, and biological evidence that supports the petition for an upgrade. The quality of life, which the Upper Perkiomen watershed now provides, should be given the highest priority by the Commonwealth of Pennsylvania.

The Montgomery County Conservation District is pleased to support this effort to conserve our natural resources.

Sincerely,

Richard H. Kadwill
Richard Kadwill
District Manager

Andrew Gilchrist
Board Chairman

Securities America, Inc.
Member NASD/SIPC

September 25, 2006

Faith Zerbe
Delaware Riverkeeper Network
300 Pond Street, 2nd Floor
Bristol, PA 19007

We are pleased to support your Petition to change the designation of the Upper Perkiomen Watershed from its various current designations, to Exceptional Value (EV). Our business believes that a thriving business climate includes places where residents and businesses exist in environmentally protected areas, that increase property values and reflect high personal incomes. We agree that these waters should be given the highest level of protection. We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Thank you.

Sincerely,

Richard H. Hoffman
Registered Principle

1811 Lesher Mill Road, Palm, PA 18070 215-679-2393 fax 215-679-4382
Richard H. Hoffman – richhoffman@comcast.net Gregg W. Hoffman – GreggHoffman@comcast.net

Fabricated Alloy Products, Inc.

1233 Water Street
PO Box 8
East Greenville, PA 18041-0008

Phone: (215) 541-4100
Fax: (215) 541-4980
Email: daw@faballoy.com

September 15, 2006

September 15, 2006

Mr. Louis J. Wentz, President
Trout Unlimited
Perkiomen Valley Chapter
P.O.Box 730
Green Lane, PA 18054

Dear Mr. Wentz,

We are pleased to support your petition to change the designation of the Hosensack/Walters Creek watershed branches of the Perkiomen Creek from Cold Water Fishery to Exceptional Value (EV).

Our business believes that a thriving business climate includes places where residents and businesses exist in environmentally protected areas, that increase property values and reflect high personal incomes.

We agree that these waters should be give the highest utmost level of protection. We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors and limestone springs.

We hope that you will convey our support to the decision-making bodies.

Sincerely yours,

FABRICATED ALLOY PRODUCTS, INC.

Lance M. Tittle
Treasurer

Wright Wine Works
125 Church Hill Road
Barto, Pennsylvania

September 1, 2006
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

Dear Mr. Wentz

We are pleased to support your Petition to change the designation of the Upper Perkiomen Watershed from its various current designations, to Exceptional Value (EV). Our business believes that a thriving business climate includes places where residents and businesses exist in environmentally protected areas, that increase property values and reflect high personal incomes. We agree that these waters should be given the highest level of protection. We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Steve Wright

1194 Huff's Church Road
Village of Huff's Church, Barto, PA 19504
PH: (610) 845-3257 www.Landhavenbandb.com

Ed & Donna Land
Proprietors

September 5, 2006

Perkiomen Valley Chapter
Trout Unlimited #332
PO Box 730
Green Lane, PA 18054

Dear Mr. Wentz,

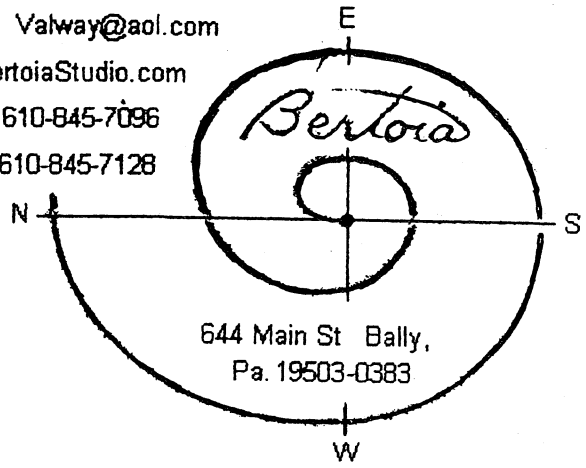
We are pleased to support your petition to change the designation of the Upper Perkiomen Watershed from its various current designations to Exceptional Value (EV). Our business believes that a thriving business climate includes places where the residents and businesses exist in environmentally protected areas. This thriving business climate contributes to increased property values.

We agree that these waters should be given the highest level of protection. We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies with our heartfelt endorsement of changing this designation to Exceptional Value (EV)

Sincerely,

Donna & Ed Land, Proprietors
Landhaven Bed & Breakfast

Bertoia Studios
Bally, Pennsylvania
e-mail: Valway@aol.com
www.BertoiaStudio.com
Phone: 610-845-7096
FAX: 610-845-7128



September 20, 2006
Perkiomen Valley Chapter
Trout Unlimited #332
P.O. Box 730
Green Lane, PA 18054

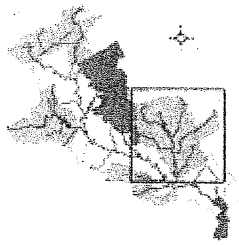
Dear Mr. Wentz

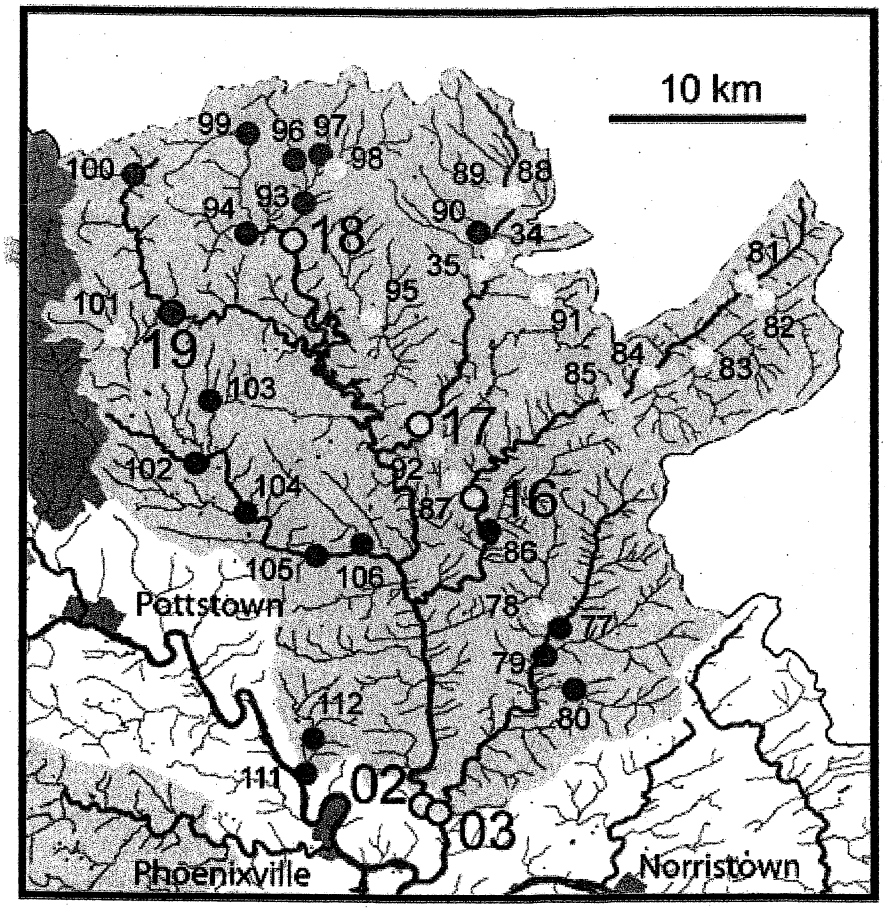
We are pleased to support your Petition to change the designation of the Upper Perkiomen Watershed from its various current designations, to Exceptional Value (EV). Our business believes that a thriving business climate includes places where residents and businesses exist in environmentally protected areas, that increase property values and reflect high personal incomes. We agree that these waters should be given the highest level of protection. We want to protect this valuable resource, which contains wild trout populations, wetlands with diverse species, healthy riparian corridors, and limestone springs. We hope that you will convey our support to the decision-making bodies.

Sincerely,

Val Bertoia

Perkiomen Creek Basin – Stroud Sample Stations





Water Quality: ●good ○fair ●poor

Stations within proposed upgrade area

18	Upper Perkiomen Creek
19	West Branch Perkiomen
93	Horsensack Creek
94	Upper Perkiomen at Tollgate
95	Macoby Creek
96	Indian Creek
97	West Hosensack Creek
98	East Hosensack Creek
99	Upper Perkiomen at Yeakel Mill
100	West Branch Perkiomen at Bob White
101	Upper Swamp at Bechtelsville

Data also available on Stroud website, www.stroudcenter.org

Basin: Upper Perkiomen Creek Basin – Data from Stroud – raw data available from J. Jackson – 610-268-2153	
Location: West Branch Perkiomen	
Station number	19
description	At Old Route 100
Latitude (decimal)	40.3961
Longitude (decimal)	-75.6084
Land Use	
Watershed area (km2)	36
Percent developed	0.7
Percent in agriculture	29.5
Percent forested	66
Percent wetland or water	1.4
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	1.2
Total Dissolved Phosphorus (mg/L)	0.018
pH	8.0
Conductivity (µmhos)	159
Alkalinity (as mg/L CaCO3)	39
Macroinvertebrate Data	

years sampled	1996-2006
MAIS score	13.7
water quality based on MAIS score	good
1st most abundandant macroinvertebrate	**Chironomidae (midges)**
2nd most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
3rd most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
4th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
5th most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
6th most abundandant macroinvertebrate	**Tipulidae (crane flies)**
7th most abundandant macroinvertebrate	**Empididae (aquatic dance flies)**
8th most abundandant macroinvertebrate	**Heptageniidae (flatheaded mayflies)**
9th most abundandant macroinvertebrate	**Philopotamidae (fingernet caddisflies)**
10th most abundandant macroinvertebrate	**Simuliidae (black flies)**

Location: Upper Perkiomen Creek	
Station number	18
description	Perkiomen Creek below Hosensack Creek, along Water Street
Latitude (decimal)	40.4203
Longitude (decimal)	-75.5242
Land Use	
Watershed area (km2)	91
Percent developed	2.2

Percent in agriculture	43.6
Percent forested	50
Percent wetland or water	1.2
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	2.4
Total Dissolved Phosphorus (mg/L)	0.026
pH	8.2
Conductivity (µmhos)	216
Alkalinity (as mg/L CaCO3)	58
Macroinvertebrate Data	
years sampled	1996-2006
MAIS score	12.2
water quality based on MAIS score	fair
1st most abundandant macroinvertebrate	**Chironomidae (midges)**
2nd most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
3rd most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
4th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
5th most abundandant macroinvertebrate	**Hydroptilidae (micro caddisflies)**
6th most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
7th most abundandant macroinvertebrate	**Tipulidae (crane flies)**

8th most abundandant macroinvertebrate	**Psephenidae (water penny beetles)**
9th most abundandant macroinvertebrate	**Planariidae (flatworms)**
10th most abundandant macroinvertebrate	**Acari (water mites)**

Location: Horsensack Creek	
Station number	93
description	At Treichlers Road
Latitude (decimal)	40.4384
Longitude (decimal)	-75.5161
Land Use	
Watershed area (km2)	43
Percent developed	2.0
Percent in agriculture	47.3
Percent forested	46
Percent wetland or water	1.6
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	2.2
Total Dissolved Phosphorus (mg/L)	0.012
pH	8.1
Conductivity (µmhos)	244

Alkalinity (as mg/L CaCO3)	53
Macroinvertebrate Data	
years sampled	2005
MAIS score	17.0
water quality based on MAIS score	good
1st most abundandant macroinvertebrate	**Chironomidae (midges)**
2nd most abundandant macroinvertebrate	**Tipulidae (crane flies)**
3rd most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
4th most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
5th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
6th most abundandant macroinvertebrate	**Baetidae (small minnow mayflies)**
7th most abundandant macroinvertebrate	**Uenoidae (stonecase caddisflies)**
8th most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
9th most abundandant macroinvertebrate	**Psephenidae (water penny beetles)**
10th most abundandant macroinvertebrate	**Planariidae (flatworms)**
Location: Upper Perkiomen at Tollgate	
Station number	94
description	Perkiomen Creek at Tollgate Road
Latitude (decimal)	40.4245
Longitude (decimal)	-75.5514
Land Use	

Watershed area (km2)	36
Percent developed	2.0
Percent in agriculture	36.5
Percent forested	58
Percent wetland or water	1.1
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	1.8
Total Dissolved Phosphorus (mg/L)	0.015
pH	8.1
Conductivity (µmhos)	182
Alkalinity (as mg/L CaCO3)	48
Macroinvertebrate Data	
years sampled	2005
MAIS score	15.9
water quality based on MAIS score	good
1st most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
2nd most abundandant macroinvertebrate	**Tipulidae (crane flies)**
3rd most abundandant macroinvertebrate	**Chironomidae (midges)**
4th most abundandant macroinvertebrate	**Psephenidae (water penny beetles)**
5th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**

6th most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
7th most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
8th most abundandant macroinvertebrate	**Heptageniidae (flatheaded mayflies)**
9th most abundandant macroinvertebrate	**Uenoidae (stonecase caddisflies)**
10th most abundandant macroinvertebrate	**Leptophlebiidae (pronggill mayflies)**
Location: Macoby Creek	
Station number	95
description	At James Street
Latitude (decimal)	40.3833
Longitude (decimal)	-75.4773
Land Use	
Watershed area (km2)	19
Percent developed	5.0
Percent in agriculture	60.2
Percent forested	31
Percent wetland or water	0.7
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	1.1
Total Dissolved Phosphorus (mg/L)	0.029
pH	9.1

Conductivity (µmhos)	232
Alkalinity (as mg/L CaCO3)	55
Macroinvertebrate Data	
years sampled	2005
MAIS score	12.6
water quality based on MAIS score	fair
1st most abundandant macroinvertebrate	**Chironomidae (midges)**
2nd most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
3rd most abundandant macroinvertebrate	**Psephenidae (water penny beetles)**
4th most abundandant macroinvertebrate	**Tipulidae (crane flies)**
5th most abundandant macroinvertebrate	**Philopotamidae (fingernet caddisflies)**
6th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
7th most abundandant macroinvertebrate	**Planariidae (flatworms)**
8th most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
9th most abundandant macroinvertebrate	**Simuliidae (black flies)**
10th most abundandant macroinvertebrate	**Acari (water mites)**
Location: Indian Creek	
Station number	96
description	At Buhman Road
Latitude (decimal)	40.4586
Longitude (decimal)	-75.5225

Land Use	
Watershed area (km2)	10
Percent developed	2.0
Percent in agriculture	38.9
Percent forested	54
Percent wetland or water	1.7
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	1.4
Total Dissolved Phosphorus (mg/L)	<0.01
pH	8.0
Conductivity (µmhos)	205
Alkalinity (as mg/L CaCO3)	42
Macroinvertebrate Data	
years sampled	2006
MAIS score	15.6
water quality based on MAIS score	good
1st most abundant macroinvertebrate	**Nemouridae (nemourid stoneflies)**
2nd most abundant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
3rd most abundant macroinvertebrate	**Chironomidae (midges)**
4th most abundant macroinvertebrate	**Oligochaeta (aquatic earthworms)**

5th most abundant macroinvertebrate	**Simuliidae (black flies)**
6th most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
7th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
8th most abundandant macroinvertebrate	**Heptageniidae (flatheaded mayflies)**
9th most abundandant macroinvertebrate	**Baetidae (small minnow mayflies)**
10th most abundandant macroinvertebrate	**Empididae (aquatic dance flies)**
Location: West Horsensack Creek	
Station number	97
description	At Palm Road
Latitude (decimal)	40.4583
Longitude (decimal)	-75.5047
Land Use	
Watershed area (km2)	10
Percent developed	2.4
Percent in agriculture	46.4
Percent forested	45
Percent wetland or water	2.0
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	2.4
Total Dissolved Phosphorus (mg/L)	0.015

pH	8.1
Conductivity (µmhos)	298
Alkalinity (as mg/L CaCO3)	53
Macroinvertebrate Data	
years sampled	2006
MAIS score	13.1
water quality based on MAIS score	good
1st most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
2nd most abundandant macroinvertebrate	**Chironomidae (midges)**
3rd most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
4th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
5th most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
6th most abundandant macroinvertebrate	**Tipulidae (crane flies)**
7th most abundandant macroinvertebrate	**Nemouridae (nemourid stoneflies)**
8th most abundandant macroinvertebrate	**Simuliidae (black flies)**
9th most abundandant macroinvertebrate	**Empididae (aquatic dance flies)**
10th most abundandant macroinvertebrate	**Plecoptera (unidentified stoneflies)**
Location: East Horsensack Creek	
Station number	98
description	Limeport Pike and Shultz Bridge Road
Latitude (decimal)	40.4547

Longitude (decimal)	-75.4992
Land Use	
Watershed area (km2)	16
Percent developed	2.1
Percent in agriculture	51.9
Percent forested	42
Percent wetland or water	0.4
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	2.8
Total Dissolved Phosphorus (mg/L)	0.012
pH	8.5
Conductivity (µmhos)	323
Alkalinity (as mg/L CaCO3)	84
Macroinvertebrate Data	
years sampled	2006
MAIS score	11.6
water quality based on MAIS score	fair
1st most abundandant macroinvertebrate	**Chironomidae (midges)**
2nd most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
3rd most abundandant macroinvertebrate	**Elmidae (riffle beetles)**

4th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
5th most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
6th most abundandant macroinvertebrate	**Helicopsychidae (snailcase caddisflies)**
7th most abundandant macroinvertebrate	**Tipulidae (crane flies)**
8th most abundandant macroinvertebrate	**Empididae (aquatic dance flies)**
9th most abundandant macroinvertebrate	**Philopotamidae (fingernet caddisflies)**
10th most abundandant macroinvertebrate	**Nematoda (nematodes)**
Location: Upper Perkiomen at Yeakel Mill	
Station number	99
description	At Yeakel Mill Road above Tollgate Road
Latitude (decimal)	40.4711
Longitude (decimal)	-75.5503
Land Use	
Watershed area (km2)	11
Percent developed	2.0
Percent in agriculture	26.7
Percent forested	67
Percent wetland or water	1.8
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	1.7

Total Dissolved Phosphorus (mg/L)	<0.01
pH	7.9
Conductivity (µmhos)	199
Alkalinity (as mg/L CaCO3)	42
Macroinvertebrate Data	
years sampled	2006
MAIS score	13.7
water quality based on MAIS score	good
1st most abundandant macroinvertebrate	**Chironomidae (midges)**
2nd most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
3rd most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
4th most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
5th most abundandant macroinvertebrate	**Simuliidae (black flies)**
6th most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
7th most abundandant macroinvertebrate	**Psephenidae (water penny beetles)**
8th most abundandant macroinvertebrate	**Heptageniidae (flatheaded mayflies)**
9th most abundandant macroinvertebrate	**Tipulidae (crane flies)**
10th most abundandant macroinvertebrate	**Baetidae (small minnow mayflies)**
Location: West Branch Perkiomen at Bob White	
Station number	100
description	West Branch Perkiomen Creek at Bob White Road

Latitude (decimal)	40.4528
Longitude (decimal)	-75.6201
Land Use	
Watershed area (km2)	6
Percent developed	0.1
Percent in agriculture	34.9
Percent forested	59
Percent wetland or water	3.7
Percent in quarries or mining	0.0
Chemistry	
Nitrate (mg/L)	1.9
Total Dissolved Phosphorus (mg/L)	0.019
pH	7.6
Conductivity (µmhos)	155
Alkalinity (as mg/L CaCO3)	27
Macroinvertebrate Data	
years sampled	2006
MAIS score	13.3
water quality based on MAIS score	good
1st most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
2nd most abundandant macroinvertebrate	**Chironomidae (midges)**

3rd most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
4th most abundandant macroinvertebrate	**Simuliidae (black flies)**
5th most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
6th most abundandant macroinvertebrate	**Nemouridae (nemourid stoneflies)**
7th most abundandant macroinvertebrate	**Ptilodactylidae (ptilodactylid beetles)**
8th most abundandant macroinvertebrate	**Acari (water mites)**
9th most abundandant macroinvertebrate	**Tipulidae (crane flies)**
10th most abundandant macroinvertebrate	**Empididae (aquatic dance flies)**
Location: Upper Swamp at Bechtelsville	
Station number	101
description	Below Moyer Road bridge
Latitude (decimal)	40.3777
Longitude (decimal)	-75.6338
Land Use	
Watershed area (km2)	12
Percent developed	0.1
Percent in agriculture	25.3
Percent forested	72
Percent wetland or water	0.6
Percent in quarries or mining	0.0
Chemistry	

Nitrate (mg/L)	1.0
Total Dissolved Phosphorus (mg/L)	0.013
pH	7.8
Conductivity (µmhos)	139
Alkalinity (as mg/L CaCO3)	23
Macroinvertebrate Data	
years sampled	2006
MAIS score	10.9
water quality based on MAIS score	fair
1st most abundandant macroinvertebrate	**Chironomidae (midges)**
2nd most abundandant macroinvertebrate	**Ephemerellidae (spiny crawler mayflies)**
3rd most abundandant macroinvertebrate	**Hydropsychidae (common netspinner caddisflies)**
4th most abundandant macroinvertebrate	**Elmidae (riffle beetles)**
5th most abundandant macroinvertebrate	**Heptageniidae (flatheaded mayflies)**
6th most abundandant macroinvertebrate	**Tipulidae (crane flies)**
7th most abundandant macroinvertebrate	**Nematoda (nematodes)**
8th most abundandant macroinvertebrate	**Oligochaeta (aquatic earthworms)**
9th most abundandant macroinvertebrate	**Acari (water mites)**
10th most abundandant macroinvertebrate	**Psephenidae (water penny beetles)**

This picture was taken from the monitoring station from the West Branch of the Perkiomen.

This picture was taken from the Upper Perkiomen Creek monitoring station on the Perkiomen Watershed.

Appendix C. Restoration Projects Implemented in Upper Perkiomen Watershed

Project Name	Town Area	State	Watershed	Township	County	Project Type	Project Length	Project Acreage	Project Implementation	Lat	Long
Bair Farm	Palm	PA	Perkiomen	Hereford	Berks	stream fencing	3960 linear feet	2.77 acres	1998 October	40d 25' 37"	75d 33' 41"
Cox Farm	Palm	PA	Perkiomen	Hereford	Berks	stream fencing	750 linear feet	.2 acres	2000 March	40d 25" 13"	75d 34' 13"
Dietrich Farm	Palm	PA	Perkiomen	Hereford	Berks	stream fencing	750 linear feet	.5 acres	2000 May	40d 32' 17"	76d 01' 35"
Ferrence Farm	Palm	PA	Perkiomen	Hereford	Berks	stream fencing	1630 linear feet	13 acres	2003 May	40d 25' 42"	75d 32' 59"
Gehringer Farm	Bally	PA	Perkiomen	Washington	Berks	stream fencing	1100 linear feet	1.5 acres	2003 June	40d 23' 51"	75d 34' 55"
Green Lane 1	Pennsburg	PA	Perkiomen	Upper Hanover	Montgomery	bioengineering	200 linear feet	.57 acres	2000 October	40d 23' 36"	75d 30' 38"
Green Lane 2	Red Hill	PA	Perkiomen	Upper Hanover	Montgomery	buffer restoration	280 linear feet	.2 acres	2000 May	40d 21' 37"	75d 37' 07"
Green Lane 3	Pennsburg	PA	Perkiomen	Upper Hanover	Montgomery	bioengineering	210 linear feet	.34 acres	2000 October	40d 23' 33"	75d 31' 34"
Hereford Township Park	Palm	PA	Perkiomen	Hereford	Montgomery	bioengineering	100 linear feet	.02 acres	2001 April	40d 25' 31"	75d 33' 08"
Hoffman Farm	Palm	PA	Perkiomen	Hereford	Berks	stream fencing	1600 linear feet	.73 acres	1999 June	40d 25' 30"	75d 34' 16"
Kahler Farm	Bally	PA	Perkiomen	Hereford	Berks	stream fencing	740 linear feet	.35 acres	2000 April	40d 25' 44"	75d 34' 23"
Lesher Mill Farm	Palm	PA	Perkiomen	Upper Hanover	Montgomery	buffer restoration, bioengineering	2005 linear feet	4 acres	2002 April	40d 25' 39"	75d 32' 14"
PP&L Hosensack Sub Station Restoration	Palm	PA	Hosensack	Upper Hanover	Montgomery	5 man-made dams were removed	NA	NA	2004 April	NA	NA
Longacre Farm	Bally	PA	Perkiomen	Washington	Berks	Stream Fencing	2000 linear feet	2 acres	2000 Sept.	NA	NA
Sipes farm	Huffs Church	PA	Perkiomen	Hereford	Berks	stream fencing	1000 linear feet	1 acre	1998 Sept	NA	NA
Garber	Barto	PA	Perkiomen	Hereford	Berks	Pond engineering, stream buffer	100 linear feet	0.1	2000 Oct.	NA	NA
Masemore	Bally	PA	Perkiomen	Hereford	Berks	Stream Fencing	1500 linear feet	1.5 acres	1997 Sept	NA	NA
Wild Run Road	Green Lane	PA	Perkiomen	Upper Hanover	Montgomery	buffer restoration	540	1.5 acres	2005 June	40d 22' 21"	75d 31' 25"

Project Name	Town Area	State	Watershed	Township	County	Project Type	Project Length	Project Acreage	Project Implementation	Lat	Long
Church Road (upstr)	Fruitville	PA	Perkiomen	Upper Hanover	Montgomery	buffer restoration	300	.25 acres	2005 June	40d 23' 50"	75d 31' 30"
Church Road (dwnstr)	Pennsburg	PA	Perkiomen	Upper Hanover	Montgomery	buffer restoration	3500	4 acres	2005 October	40d 23.35' 83"	75d 30.53' 78"
Heffernan Road	Green Lane	PA	Perkiomen	Upper Hanover	Montgomery	buffer restoration	600	.6 acres	2005 June	40d 22' 58"	75d 30' 22"
East Greenville water Plant	East Greenville	PA	Perkiomen	Upper Hanover	Montgomery	buffer restoration	100	0.1	2005 November	40d 24.27' 40"	75d 31.16' 62"
East Greenville Water Plant(2)	East Greenville	PA	Perkiomen	Upper Hanover	Montgomery	buffer restoration	500	2 acres	2006 October	40d 24.42' 77"	75d 31.13' 18"

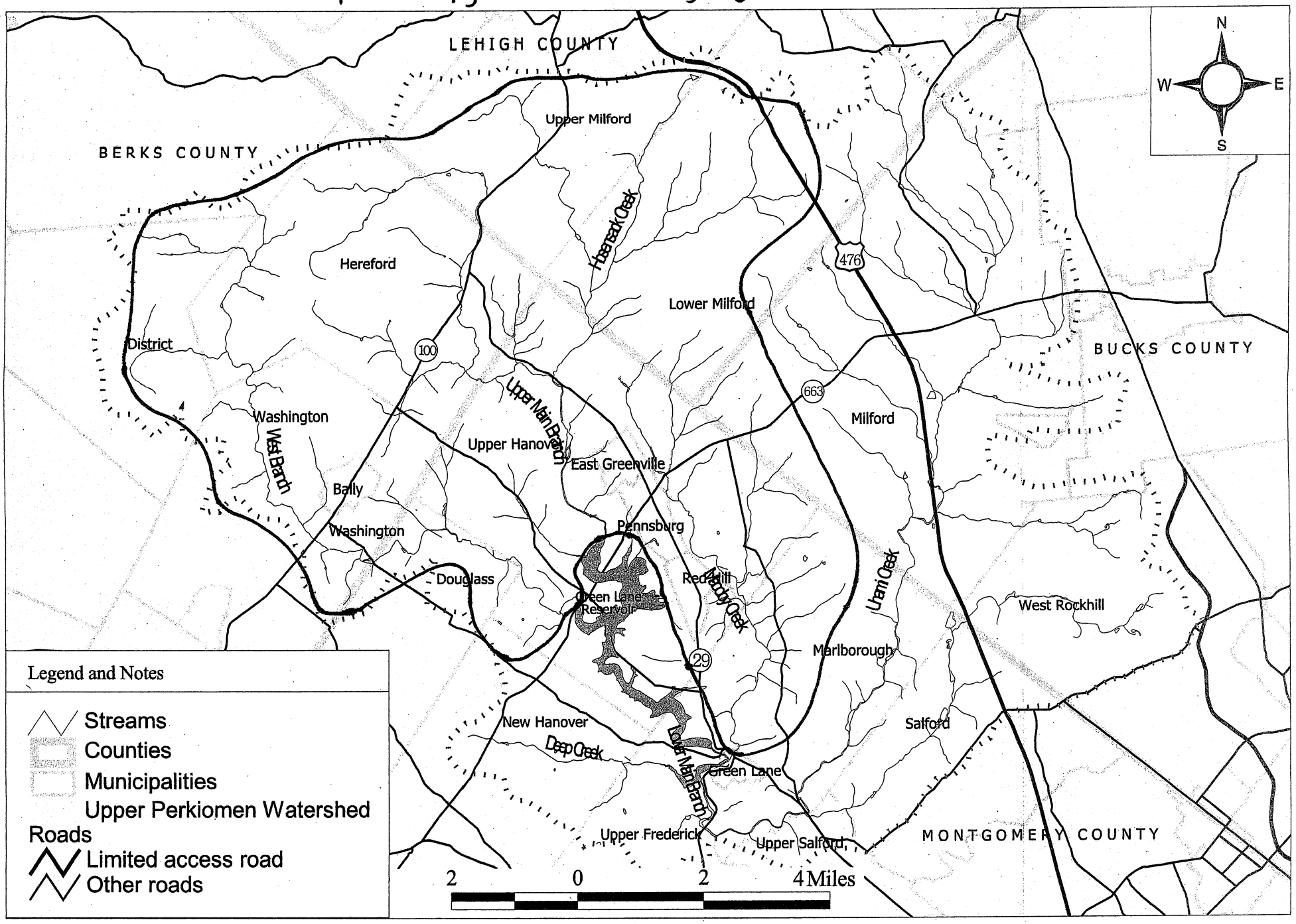
The **Perkiomen Valley Trout Unlimited** assisted with every project stream excluding Green Lane 2 &3 and Sipes Farm.
The **Delaware Riverkeeper Network** assisted with every project stream excluding Longacre Farm, Sipes Farm, Garber, and Masemore.
The **Patrick Center Academy of Natural Sciences, U.S. Fish and Wildlife Service**, and the **PA Fish and Boat Commission** assisted with the Blair and Hoffman Farm Stream Projects.
The **Perkiomen Watershed Conservancy** assisted with every stream project excluding the Blair Farm, Green Lane 2 & 3, Sipes Farm, Garber, and Masemore streams.
Green Lane 1 Stream Project was helped by The **Academy of Natural Sciences, Phl. Suburban Water Co., Montgomery Co. Parks Dept., and the Upper Perkiomen School District.**
The **Philadephia Suburban Water Company** (now Aqua PA) also assisted with Green Lane 2, 3, and Masemore Stream Projects.
The **PA Fish and Boat Commission** helped with the Deitrich Farm and Masemore Streams, as well as the UPWC.
The **Berks Conservancy** and **Tulpehocken TU** both assisted with Longacre and Sprie Farm streams, as well as **Penn State Coop Ext.** at the Gehringer Farm Site.
The **Pennsylvania Horticultural Society Tree-vitalize Program and Aqua PA** participated in the Wild Run, Heffernan Road, and Church Road projects

Appendix D

Maps

Proposed Upgrade Area with Locations
Geology of Upper Perkiomen
Preserved Open Space
Prime Agricultural Farmland
Hydrologic Resources
Point Source Discharges
Riparian Issues
Audubon Map of Important Bird Area
Habitat Value, Schuylkill Conservation Plan
Sensitive Lands, Schuylkill Conservation Plan
Proposed Greenspace, Schuylkill Conservation Plan
West Branch Perkiomen PA DEP Map

Most GIS maps come from the Upper Perkiomen Creek Watershed Conservation Plan prepared by Natural Lands Trust, The Upper Perkiomen Watershed Coalition, and Pennsylvania Environmental Council



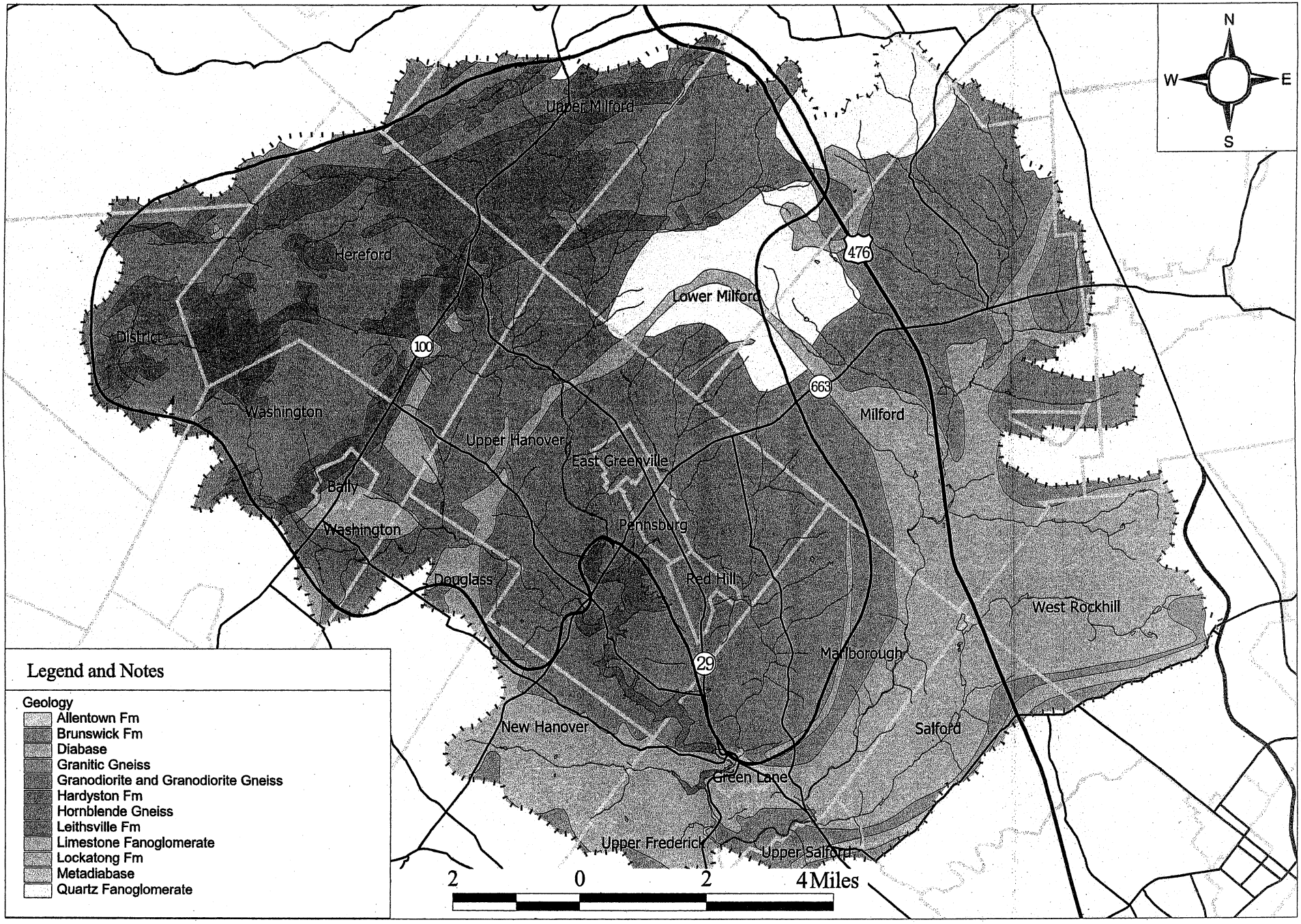
2001
Upper Perkiomen
Rivers Conservation Plan

Figure
Location Map

Pennsylvania Environmental Council
117 South 17th Street, Suite 2300, Philadelphia PA 19103
(215) 563 0250 http://www.pecpa.org

Natural Lands Trust
Hildacy Farm, Palmers Mill Road, Media PA 19063
(610) 353 5587 http://www.natlands.org

Upper Perkiomen Watershed Coalition
P.O. Box 233, Palm, PA 18070-0233
http://www.upwcwatershed.org



2001
Upper Perkiomen
Rivers Conservation Plan

Figure 3:
Geology

Pennsylvania Environmental Council
117 South 17th Street, Suite 2300, Philadelphia PA 19103
(215) 563 0250 http://www.pecpa.org

Natural Lands Trust
Hildacy Farm, Palmers Mill Road, Media PA 19063
(610) 353 5587 http://www.natlands.org

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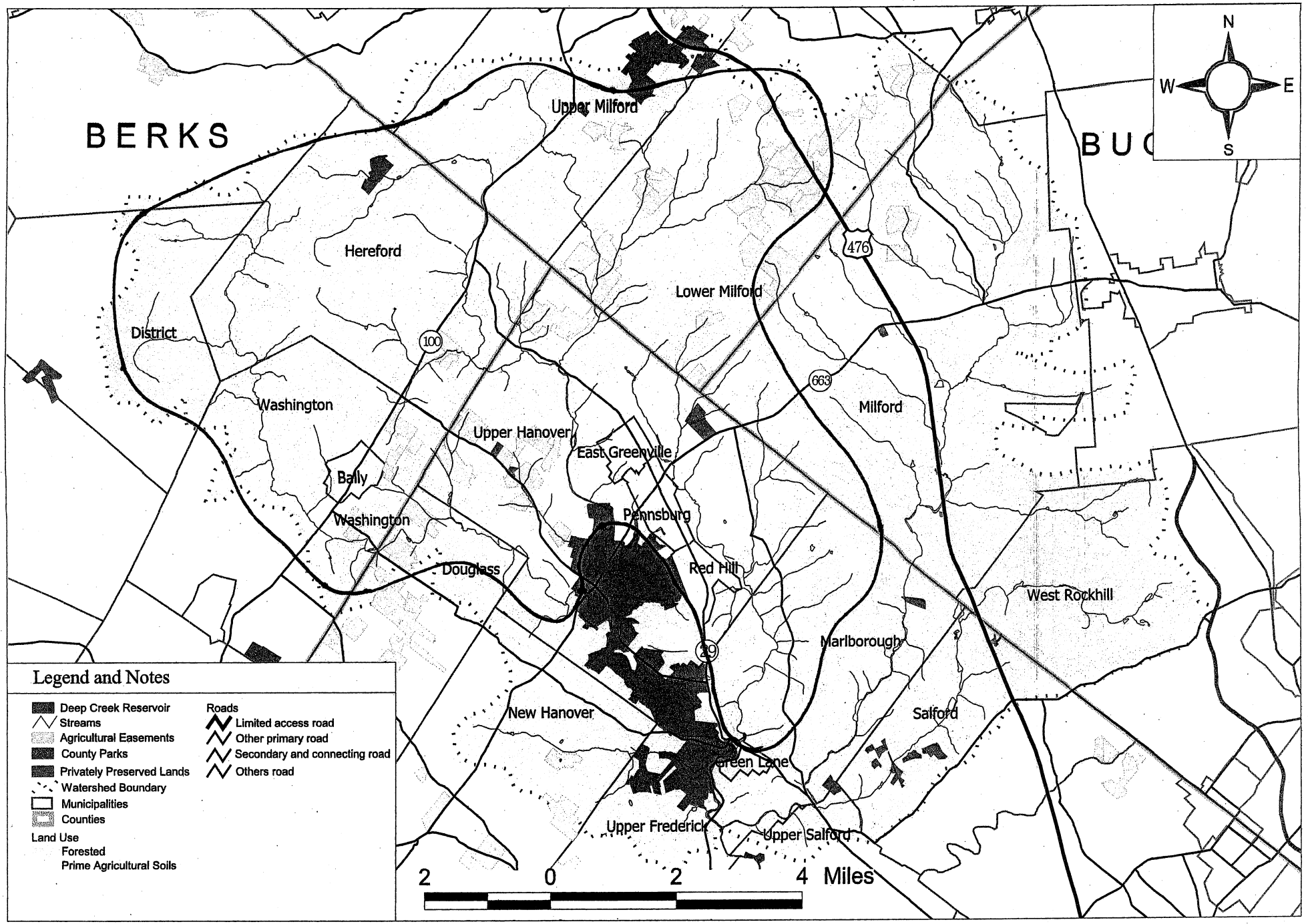

2001
Upper Perkiomen
Rivers Conservation Plan

Figure
Preserved Open Space

Pennsylvania Environmental Council
117 South 17th Street, Suite 2300, Philadelphia PA 19103
(215) 563 0250 http://www.pecpa.org

Natural Lands Trust
Hildacy Farm, Palmers Mill Road, Media PA 19063
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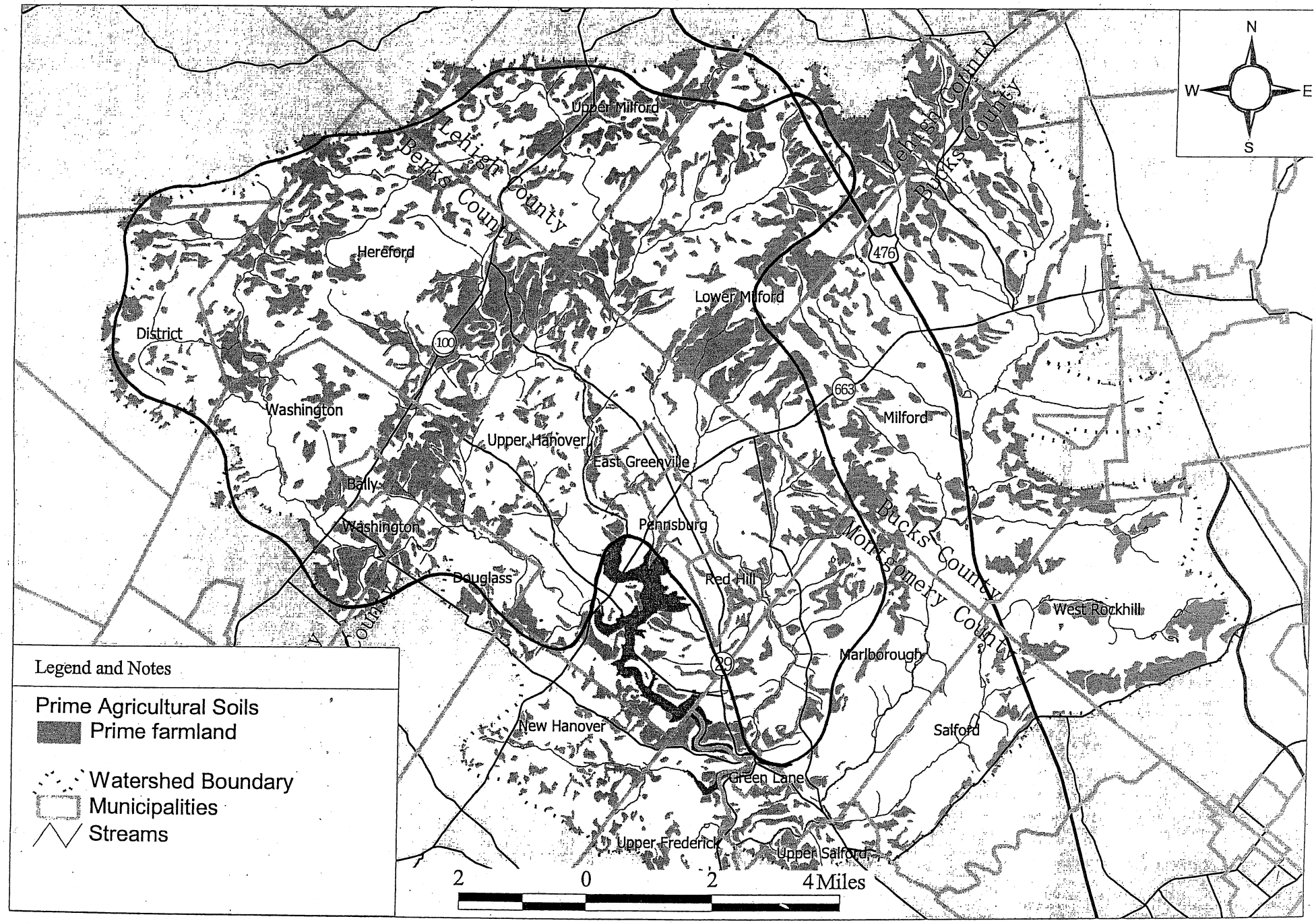


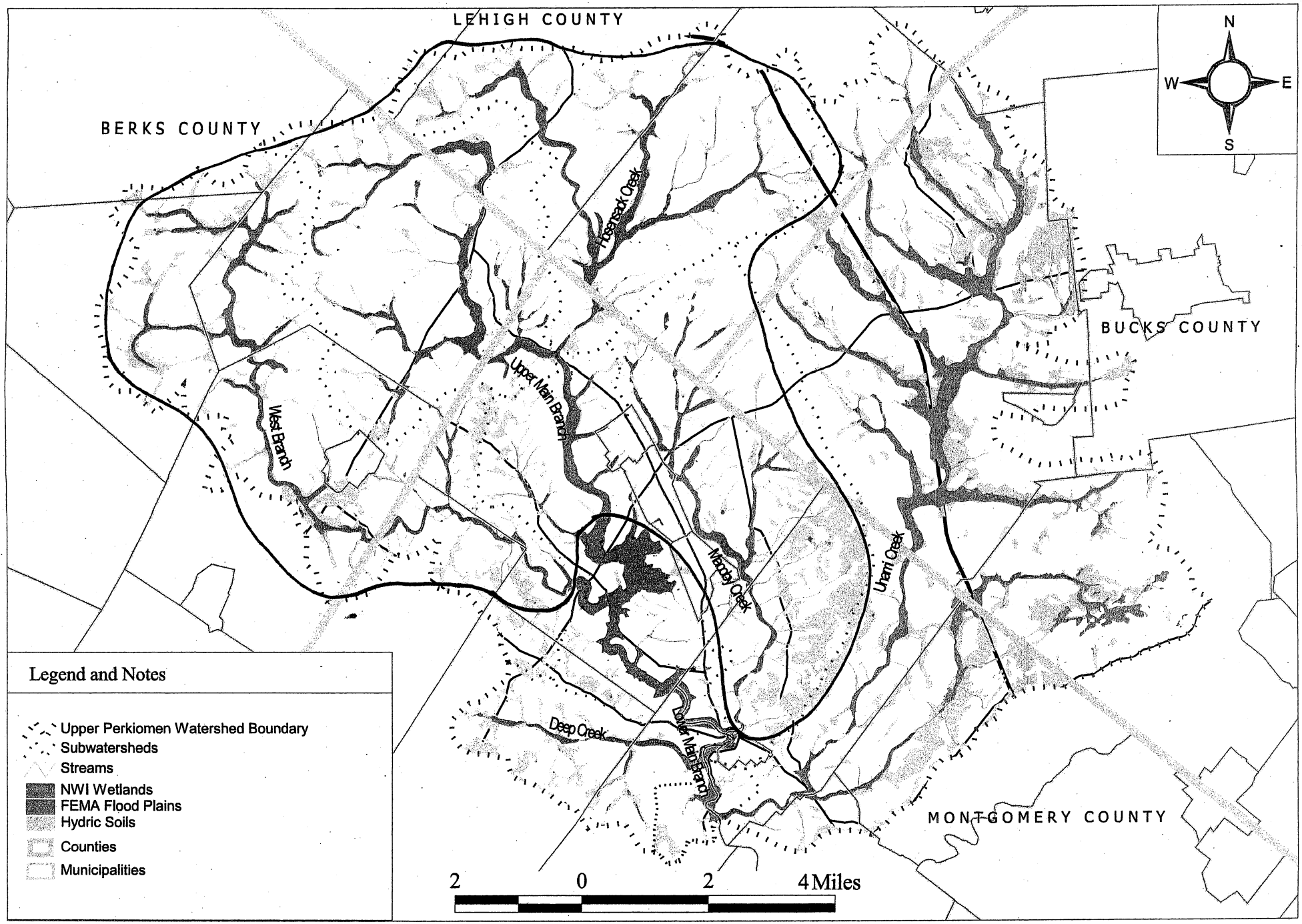
Upper Perkiomen
Rivers Conservation Plan

Figure 5
Prime Agricultural Farmland

Pennsylvania Environmental Council
117 South 17th Street, Suite 2300, Philadelphia PA 19103
(215) 563 0250 http://www.pecpa.org

Natural Lands Trust
Hildacy Farm, Palmers Mill Road, Media PA 19063

Upper Perkiomen Watershed Coalition
P.O. Box 233, Palm, PA 18070-0233



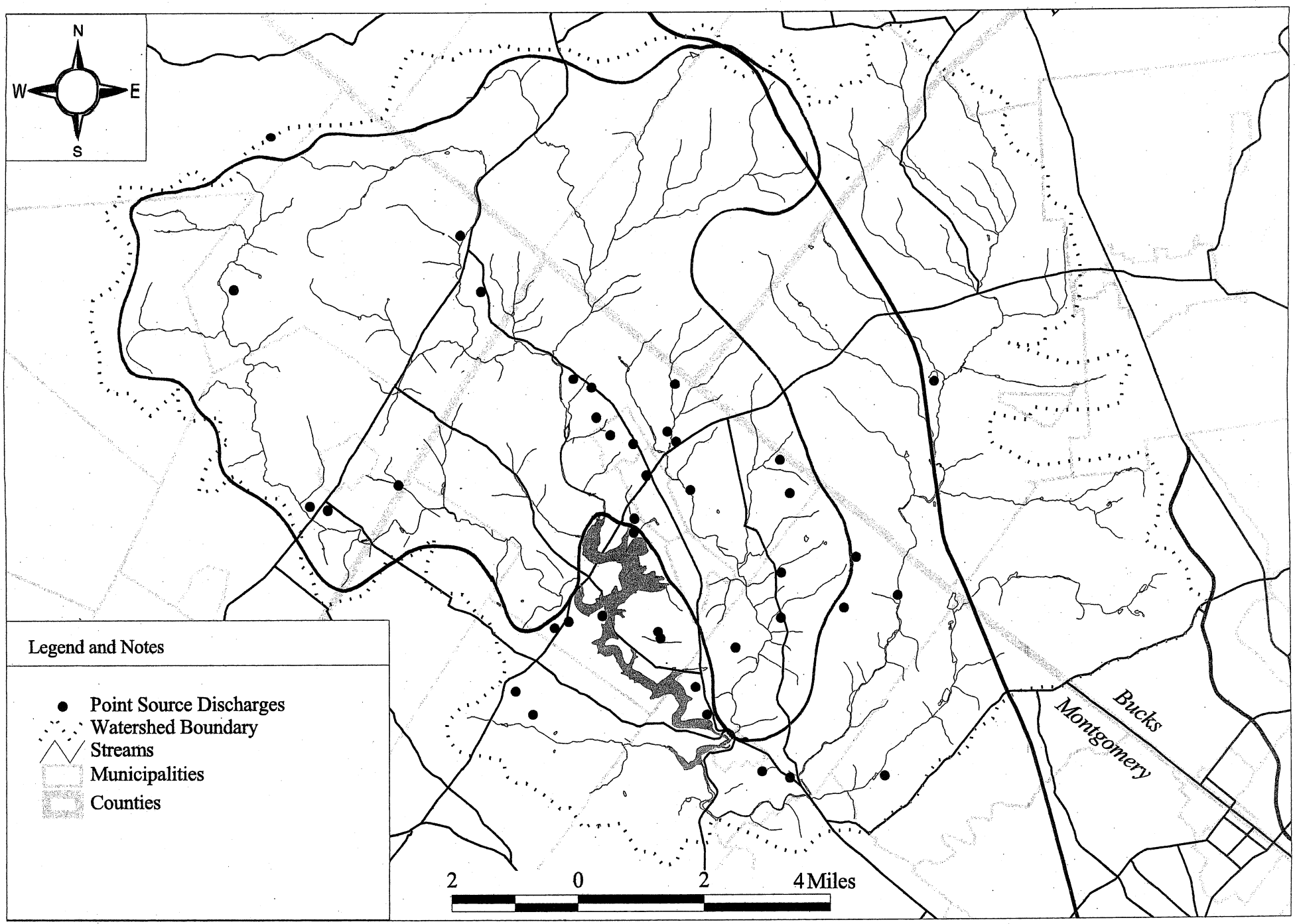
2001
Upper Perkiomen
Rivers Conservation Plan

Figure 7c
Hydrologic Resources

Pennsylvania Environmental Council
117 South 17th Street, Suite 2300, Philadelphia PA 19103
(215) 563 0250 http://www.pecpa.org

Natural Lands Trust
Hildacy Farm, Palmers Mill Road, Media PA 19063
(610) 353 5587 http://www.natlands.org

Upper Perkiomen Watershed Coalition
P.O. Box 233, Palm, PA 18070-0233
http://www.upwcwatershed.org



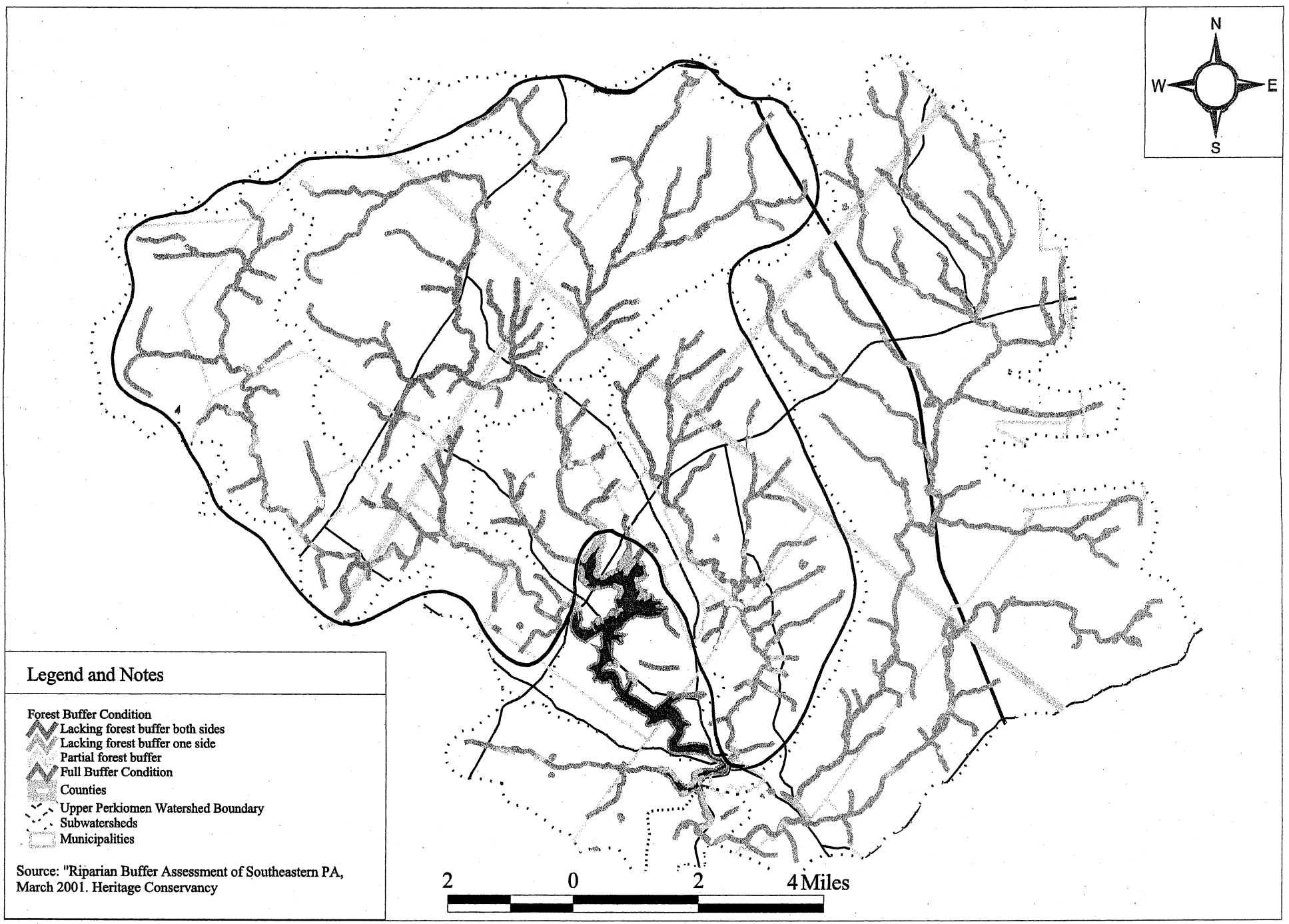
2001
Upper Perkiomen
Rivers Conservation Plan

Figure 9a
Point Source Discharges

Pennsylvania Environmental Council
117 South 17th Street, Suite 2300, Philadelphia PA 19103
(215) 563 0250 http://www.pecpa.org

Natural Lands Trust
Hildacy Farm, Palmers Mill Road, Media PA 19063
(610) 353 5587 http://www.natlands.org

Upper Perkiomen Watershed Coalition
P.O. Box 233, Palm, PA 18070-0233
http://www.upwcwatershed.org



Legend and Notes

Forest Buffer Condition
- Lacking forest buffer both sides
- Lacking forest buffer one side
- Partial forest buffer
- Full Buffer Condition
- Counties
- Upper Perkiomen Watershed Boundary
- Subwatersheds
- Municipalities

Source: "Riparian Buffer Assessment of Southeastern PA, March 2001. Heritage Conservancy

2001 Upper Perkiomen Rivers Conservation Plan

Some of these locations have since been restored.

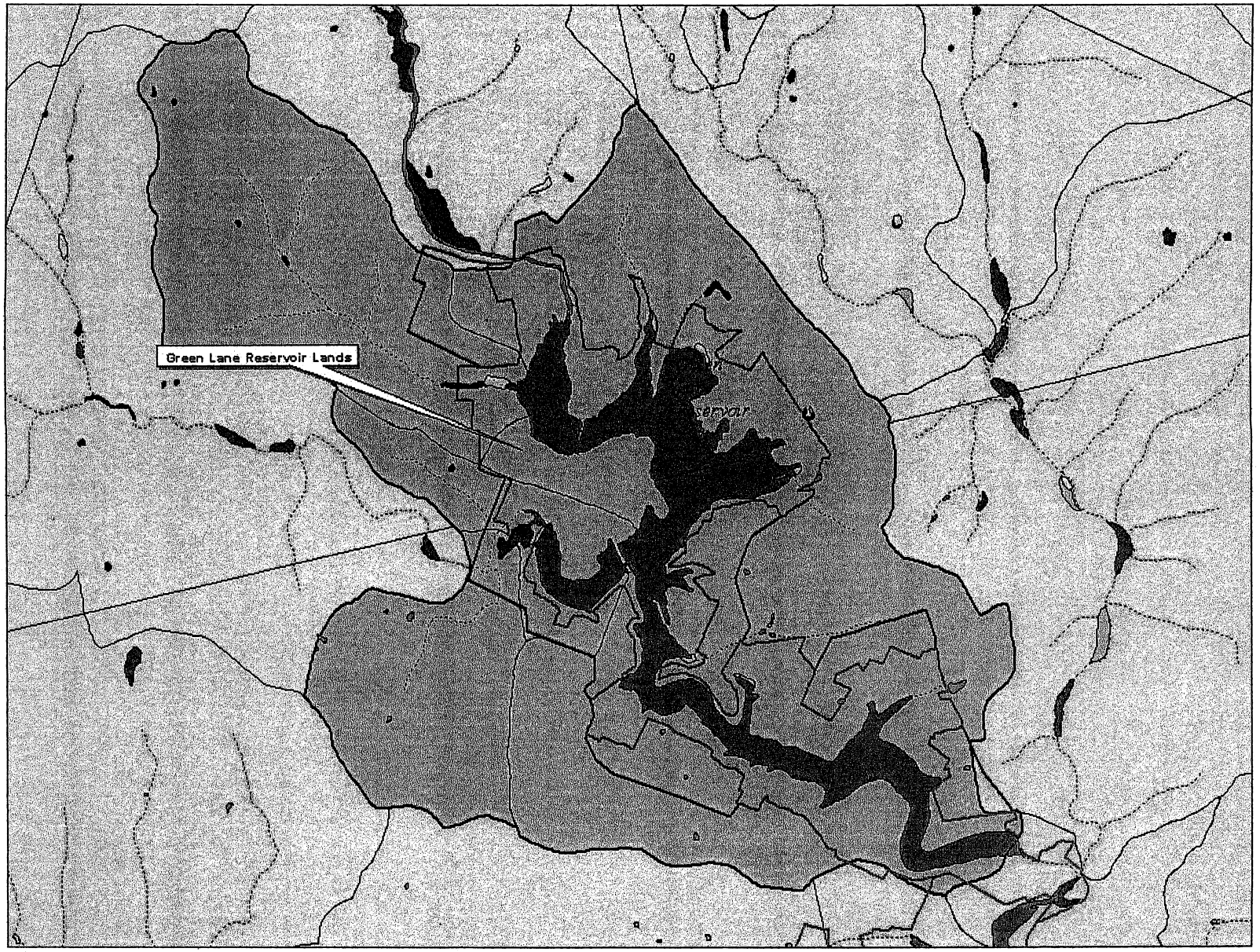
Riparian Issues

Pennsylvania Environmental Council
117 South 17th Street, Suite 2300, Philadelphia PA 19103
(215) 563 0250 http://www.pecpa.org

Natural Lands Trust
Hildacy Farm, Palmers Mill Road, Media PA 19063
(610) 353 5587 http://www.natlands.org

Upper Perkiomen Watershed Coalition
P.O. Box 233, Palm, PA 18070-0233
http://www.upwcwatershed.org

Green Lane Reservoir - Important Bird Area # 69



Audubon
Pennsylvania Audubon Society

Legend

- Core Boundary
- Watershed Boundaries
- PA County Boundaries
- Streams
- PA Stewardship Lands

Wetlands - NWI

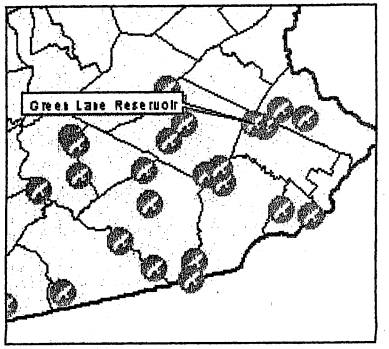
- Riverine
- Estuarine
- Lacustrine

Palustrine NWI Types

- Forested
- Emergent
- Aquatic Bed
- Open Water
- Scrub-Shrub
- Unconsolidated Bottom
- Unconsolidated Shore

- Watershed Boundary
- USGS 7.5 minute Boundaries

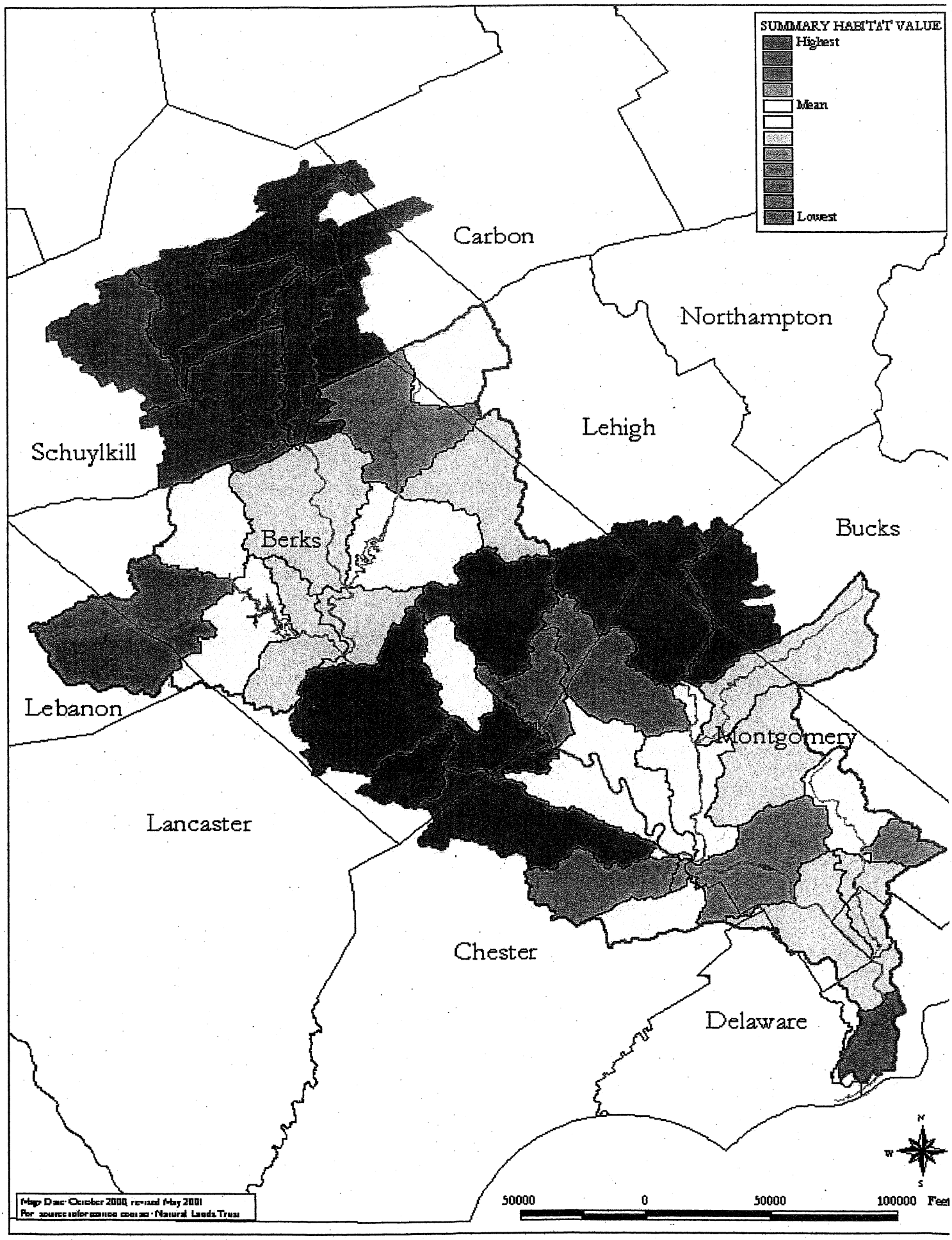
Southeastern Pennsylvania



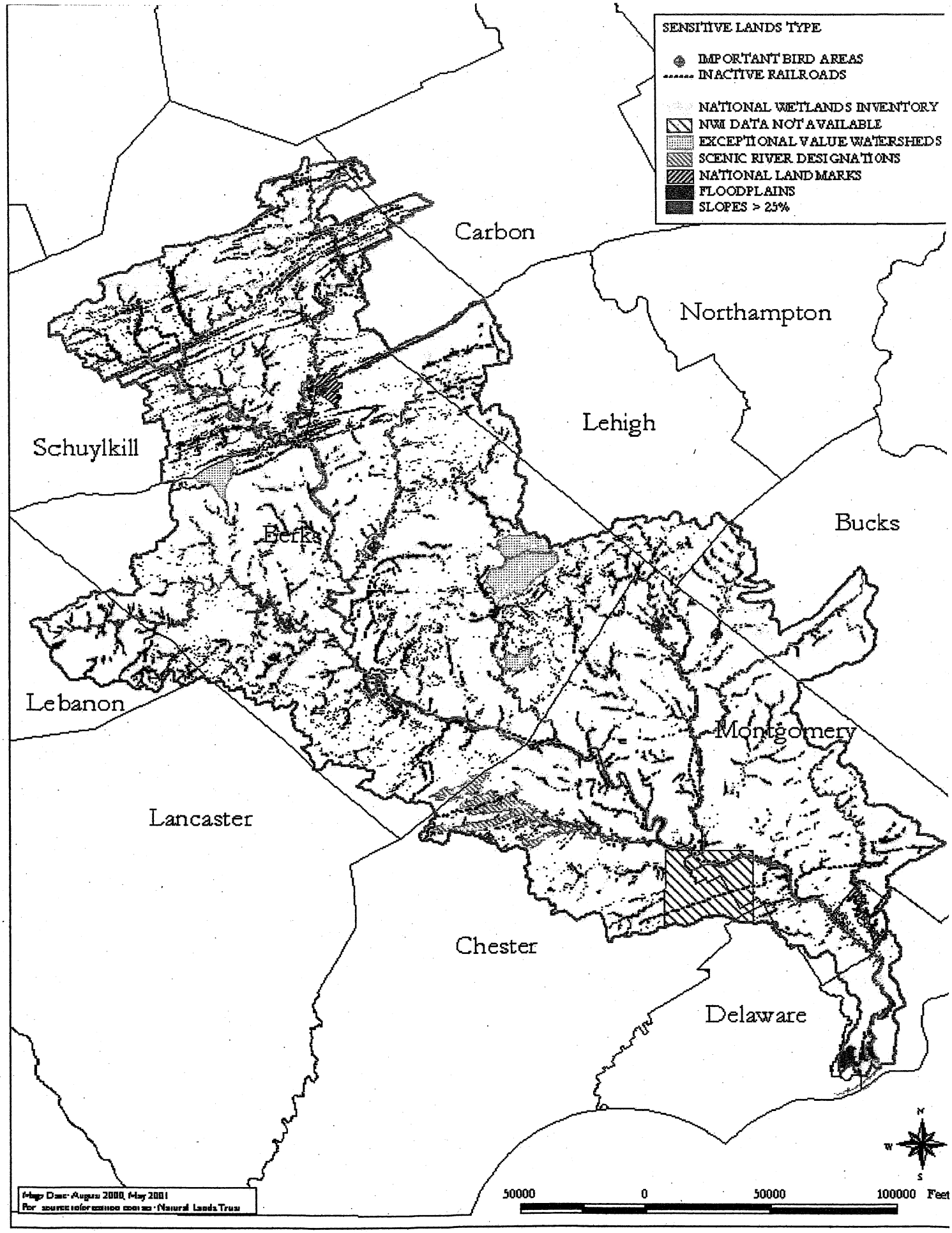
0.5 0 0.5 Miles

Map 69b - Watershed and wetlands map of the Green Lane Reservoir Important Bird Area (No. 69). The site is located in Montgomery County Pennsylvania northeast of the city of Pottstown. Total areas within the displayed boundaries include: Core site - 3177 acres, watershed area - 7238 acres, stewardship lands - 2392 acres.

Joseph A. Bishop - June, 2002



Schuylkill Watershed Conservation Plan	**Summary Habitat Value**	THE ACADEMY OF NATURAL SCIENCES Patrick Center	The Conservation Fund	NATURAL LANDS

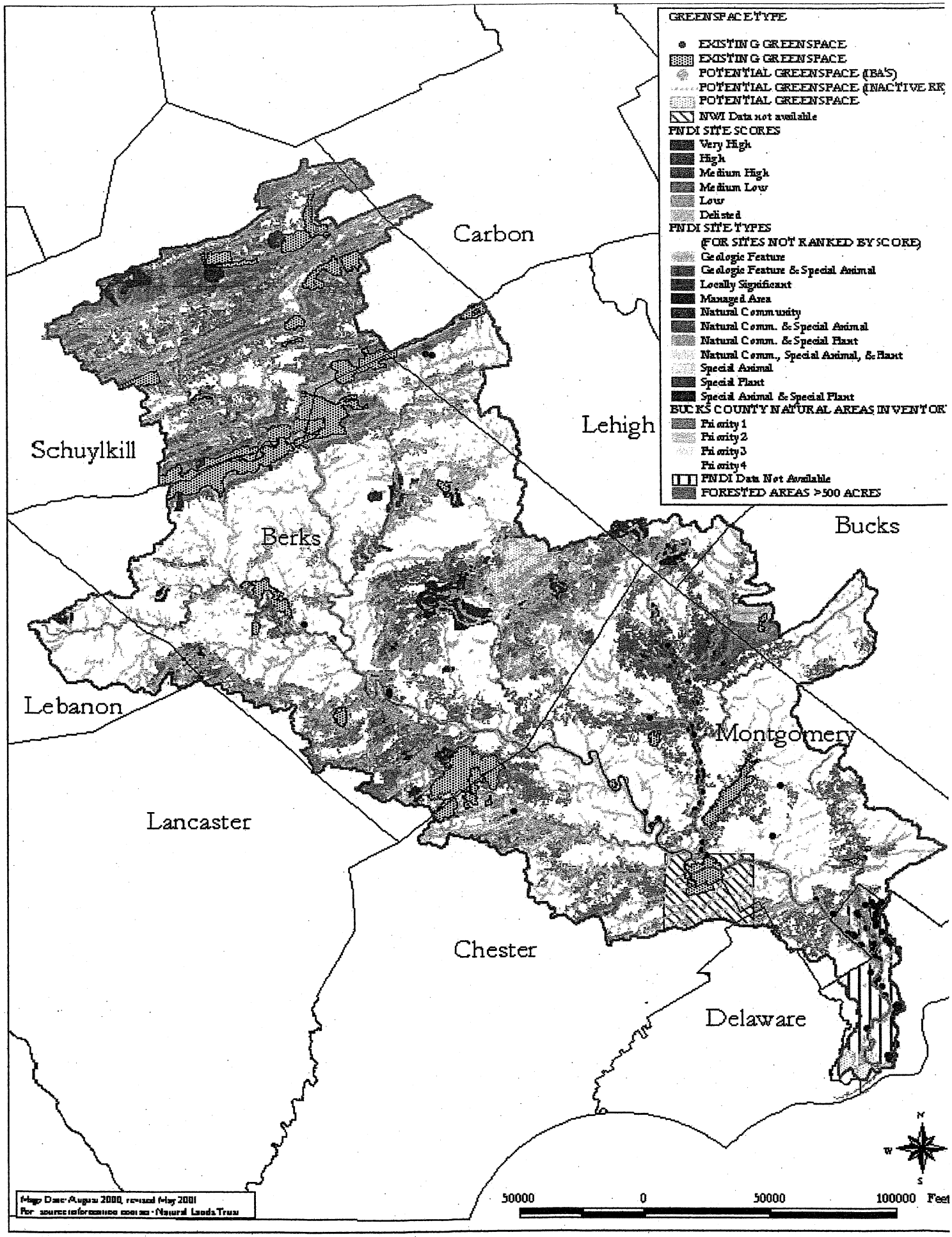


Schuylkill Watershed Conservation Plan

Sensitive Lands

THE ACADEMY OF NATURAL SCIENCES Patrick Center

The Conservation Fund



Schuylkill Watershed Conservation Plan

Composite Proposed Greenspace

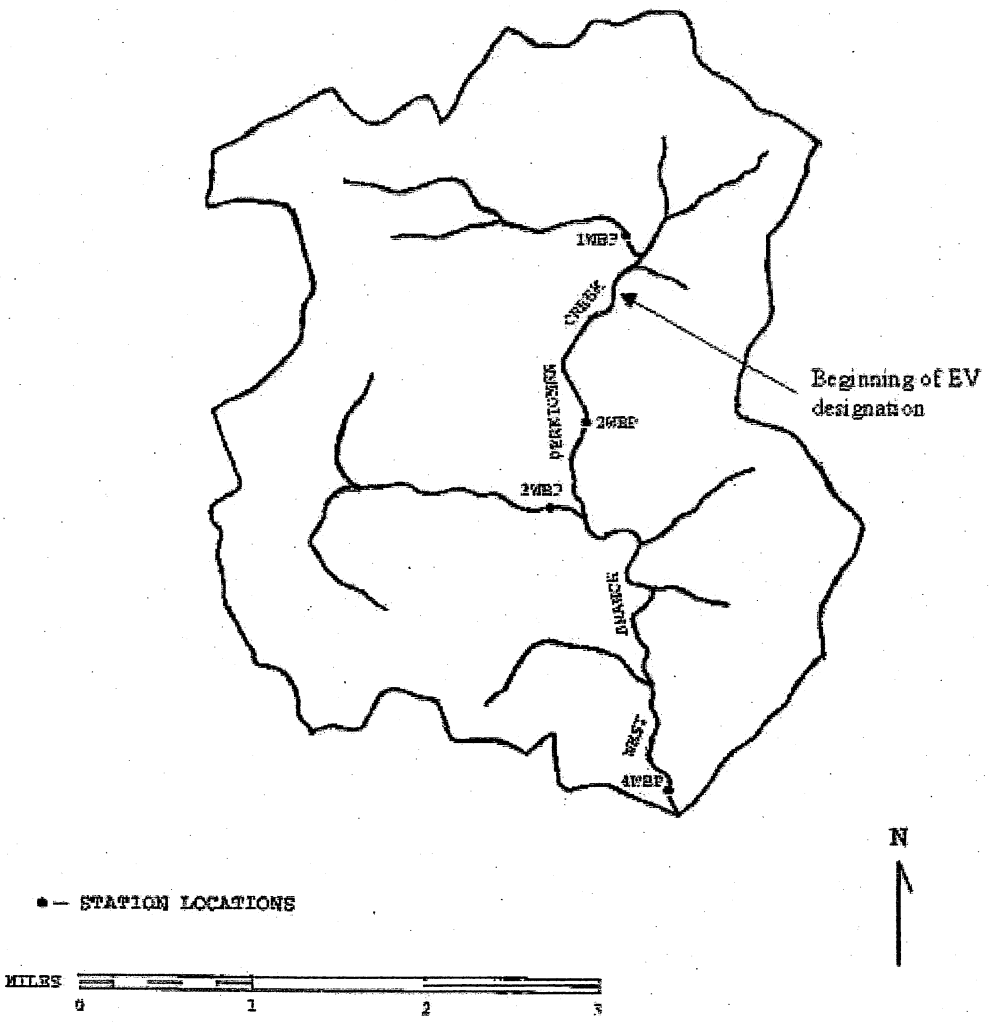
THE ACADEMY OF NATURAL SCIENCES Patrick Center

The Conservation Fund

FIGURE 1.

WEST BRANCH PERKIOMEN CREEK

BERKS COUNTY



From PA DEP Stream Designation Evaluation Report, West Branch Perkiomen July, 2001.

Delaware Riverkeeper Water Chemistry Data for Macoby Creek

ID Code		Date (d/m/y)	Time	Stream Name	Location	Community	Township	County	State	Zip Code	Observer	Phone	Present Weather	Past 2-5days	Air Temp (C)	Water Temp (C)	Stream Depth (m)	DO first	DO second	DO third	Avg DO	% DO Saturation	pH	Nitrate-Nitrogen (mg N/L)	Nitrate (NO3) (mg N/L)	Ortho-Phosphate (mg PO4/L)	Turbidity (JTU)	Wildlife	Comments
MC001	MC001	1/6/02	11:45 AM	Macoby Creek	Quakertown Rd. Crossing						George van Rossum		Overcast	Overcast	3	2	0.1	11.0	10.6		10.8	78.4	7.5	0.8	3.52	0.1999	0	Common birds	
	MC001	1/27/02	12:00 PM										Sunny	some rain	7	5	0.123	12.3	12.2		12.25	95.4	7.5	1	4.4	0.1999	5		No blooms or submerged vegetation; fast flowing water from rain and
	MC001	3/17/02	11:35 AM										Overcast	Mixed, Clouds & Sun	4.5	6.5	0.11	12.4	12.4		12.4	100.1	7.5	0.6	2.64	0.1999	0		
	MC001	4/28/02	1:45 PM										Overcast	Variable	13	13	0.3	5.4	6.2	6.4	6.3	59.2	7.5	0.5	2.2	0.1999	25		Because of the rainfall last night the creek was muchdeeper, very much wider and very
	MC001	6/9/02	11:30 AM										Sunny	Variable	22	21	0.18	8.4	8.4		8.4	94.4	7.5	0.8	3.52	0.1999	0	Damselflies	Water much much less deep than previous observation (May). A large dead tree was wedged between the central pillar of the bridge and the right bank– 45 cm above water. On top
	MC001	7/21/02	9:45 AM										Sunny	Sunny	24	23	0.115	8.2	8.0		8.1	95.0	8	0.2	0.88	0.1999		Dragonflies in the vegetation on the banks.	The pile of debris has found a small shift of gravel. This has a) diverted some water into the left bbank arch of the bridge;
	MC001	8/25/02	1:00 PM										Sunny	Sunny	21	23.5	0.145	8.6	9.0		8.8	104.2	8	0.1999	0.87956	0.1999	0	Water boatmen on surface. A school of small fish;	Some short, brown weed on bottom stones; Apart from the 2.7 cm of rain during the past two night,
	MC001	11/3/02	12:45 PM										Overcast	Mixed overcast	10	7	0.2	11.2	11.2		11.2	91.5	7	0.1999	0.87956	0.1999	0		Fast flowin stream, extending
	MC001	12/8/02	12:45 PM										Overcast	Overcast	3	3	0.18	1.5	1.5		1.49	11.1	7.5	0.1999	0.87956	0.1999	0		A few blades of grass-like
	MC001	5/25/03	3:00 PM	Macoby Creek							George van Rossum		Overcast	Mixed Sun/Rain	13.5	14	0.29	7.8	7.6		7.7	74.0	7	0.1999	0.87956	0.1999	6		Water very turbid and fast-
	MC001	6/23/03	5:00 PM										Overcast	Mixed Sun/Rain	18	16	0.365	1.2	1.2		1.2	12.1	7	0.2	0.88	0.1999	2.5		Creek very full; Oxygen level here seems
	MC001	8/10/03	12:15 PM										Partly Cloudy	Mixed Sun/Rain	24	22	0.35	7.6	7.2		7.4	85.0	7.5	0.1999	0.87956	0.1999	15		
	MC001	9/21/03	12:15 PM										Sunny	Mixed Sun/Rain	18	19	0.29	8.6	8.8		8.7	93.6	7.5	0.1999	0.87956	0.1999	0	Water strider; tadpole; crayfish	The barrier that developed last year across the main branch of stream has loargely cleaned–
	MC001	10/19/03	12:45 PM										Overcast	Clear	12	13	0.26	10.1	10.6		10.35	97.3	7.5	0.1999	0.87956	0.2	0	Water striders; small fish	
	MC001	12/18/02	12:45 PM										Overcast	Cloudy, snow	3	3	0.18	14.6	15.2		14.9	110.7	7.5	0.1999	0.87956	0.1999	0		
	MC001	1/19/03	12:45 PM										Partly Cloudy	Bright and Cold	0.5	2	0.16	13.8	14.0		13.9	100.9	7.5	0.1999	0.87956	0.1999	0		No vegetation in water
	MC001	3/16/03	12:00 PM										Sunny	Variable	10.5	9	0.23	11.2	11.2		11.2	95.9	7	0.1999	0.87956	0.1999	4.5		Water very

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	MC001	7/29/06	1:30 PM										Sunny	Hot and Humid	24	22.5		7.0	7.0		7.0	81.2	7.5	0.1999	0.87956	0.1999	0		water level back to normal after the much higher levels
RAIN Event	MC001	6/27/06	3:55 PM										High clouds;humid	Pds of heavy rain	22	20	0.45	6.2	6.3		6.3	68.8	7.5	0.1999	0.87956	0.1999	10	none	water too turbid & fast to see bottom, flooding conditions
	MC001	12/1/05	12:52 PM										cold & overcast	cold & overcast	6	9.5	0.36	10.2	10.0		10.1	87.5	7	0.1999	0.87956	0.1999	0		
																					178.4	**1636.2**	**149**	**6.6987**		**3.9981**			
Averages for MC001																					**8.9**	**81.8**	**7.43**	**0.334935**		**0.199905**			
MC002	MC002	1/6/02	1:30 PM	Macoby Creek	Main Street/Rte 63, Green Lane, PA						George van Rossum		Overcast	Overcast and cold	6	1	0.15	13.8	14.2		14	99.3	8	0.4	1.76	0.1999	0		Submerged vegetation
	MC002	1/27/02	1:15 PM										Sunny	Rain	12	5	0.18	9.2	9.4		9.3	72.5	7.5	1	4.4	0.1999	5		Some moss on stones near edge, and some submerged land plants;
	MC002	3/17/02	12:05 PM										Overcast	3 sunny days followed by overcast	7	4.5	0.32	14.0	14.6		14.3	110.1	8.5	0.4	1.76	0.1999	7.5		
	MC002	4/28/02	3:45 PM										Sunny	Variable	20	14		9.0	9.4		9.2	88.5	7	0.4	1.76	0.1999	30	Virginia bluebells and spring beauty on bank near water's edge.	River much wider, fast and deeper than usual.
	MC002	5/9/02	3:30 PM										Sunny	Heavy rain to sunny/warm	34	23	0.275	9.4	10.0		9.7	113.7	8	0.8	3.52	0.1999	0		Submerged algae on stones in the deepest part of the creek; Creek very
	MC002	7/21/02	8:30 AM	Macoby Creek	Main Street/Rte 63, Green Lane, PA						George van Rossum		Sunny	Sunny, Cool	23.5	24	0.18	6.2	6.2		6.2	74.2	7.5	0.1999	0.87956	0.1999	2.5		No rain to speak of for 2-3 weeks. Water level and stream width very much reduced. Algal bloom at
	MC002	8/25/02	11:15 AM										Sunny	Sunny and hot	28	23.5	0.17	7.2	7.4		7.3	86.5	8	0.1999	0.87956	0.1999	0	Schools of minnows	Brown weed under water, attached to bottom stones; green algae
	MC002	11/3/02	11:30 AM										Overcast	Mixed	7	7.5	0.37	12.6	13.0		12.8	105.8	7.75	0.1999	0.87956	0.1999	0		Fast flowing stream, extending across one whole branch; the branch
	MC002	12/8/02	11:15 AM	Macoby Creek	Main Street/Rte 63, Green Lane, PA						George van Rossum		Overcast	Cloudy, snow	1.50	5	0.3	15.0	13.6	15.6	15.3	119.2	8	0.1999	0.87956	0.1999	0		
	MC002	1/19/03	12:40 PM										Mixed sun/cloud		1	1.5	0.27	14.8	15.2		15	107.6	7.5	0.1999	0.87956	0.1999	0		No vegetation in water
	MC002	3/16/03	10:55 AM										Sunny	Variable	17	5	0.4	13.8	13.2		13.5	105.2	7	0.1999	0.87956	0.1999	0		
	MC002	5/25/03	2:30 PM										Overcast	Mixed Sun/Rain	17	13.5		7.8	7.8		7.8	74.1	7	0.1999	0.87956	0.1999	60		Water was unusually
	MC002	6/23/03	3:00 PM										Overcast	Mixed Sun/Rain	22	16.5		9.8	9.2		9.5	96.7	7.5	0.1999	0.87956	0.1999	27.5		
	MC002	8/10/03	11:00 AM										Mixed sun/cloud	Mixed Sun/Rain	26	22		3.6	3.6		3.6	41.3	7.5	0.1999	0.87956	0.1999	20		
	MC002	9/21/03	11:10 AM										Sunny	Mixed Sun/Rain	22	18	0.435	9.4	9.2		9.3	97.9	7.5	0.1999	0.87956	0.1999	0		
	MC002	10/19/03	12:00 PM										Overcast		14.5	13	0.28	7.8	7.6		7.7	72.4	8	0.1999	0.87956	0.1999	5		Many stones on bottom covered with dark green,

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	MC002	7/29/2006	12:00 PM										Very hot and humid		30	25	0.4	7.6	7.8		7.7	94.0	7.5	0.1999	0.87956	0.1999	0		Water level back to normal after past July
RAIN Event	MC002	6/27/2006	3:15 PM										sunny	pds of heavy rain	27	23.5		6.8	6.8		6.8	80.5	7.5	0.1999	0.87956	0.1999	40	none	creek dangerously high, vegetation on banks
	MC002	12/1/2005	12:15 PM										Overcast	some light snow, generally overcast	9	3.5		10.0	10.0		10.0	75.2	7.5	0.1999	0.87956	0.1999	0		
	MC002																				**189**	**1714.7**	**145**	**5.7986**		**0.1999**			
Averages for MC002																					**9.947**	**90.2**	**7.62**	**0.3052**		**0.1999**			
																										0.009995			
	Site B	8/4/2006	10:30 AM	Macoby	Warner School Road near Kraussdale Road								sunny	very hot and humid	33	25		0.0	0.0		0.0		7.0	0.1999		0.1999			white filamentous substance-no DO!!—problem site
	Site C	8/4/2006	NA-	Macoby	Bridge on Kraussdale Road, SW Kings Highway								overcast	hot and humid	24	21		8.0	8.2	8.0	8.1	91.0	8.0	0.1999		0.1999			
	Site F	8/5/2006	9:50 AM	Macoby Creek Tributary	300 m from Kings Hwy, creek parallel to Titlow Road						George van Rossum		sunny	hot and humid	22	21		7.8	7.8		7.8	87.7	7.5			0.1999			
	Site A	8/6/2006	11:00	Macoby Creek	Kraussdale Road downstream from Site B								sunny	hot and humid	25	23		5.8	5.8		5.8	68.0							
	Site B	8/6/2006	11:15	Macoby Creek	Warner School Road near Kraussdale Road								sunny	hot and humid	26	22		5.8	5.8		5.8	66.6							
	Site A	8/18/2006	10:50	Macoby Creek	Bridge on Kraussdale Road, SW Kings Highway (DS from site B)								overcast	warm and humid	21.5	20		6.8	6.2	6.3	6.3	68.8	7.5	0.1999		0.1999			
	Site B	8/18/2006	11:10	Macoby Creek	Warner School Road near Kraussdale Road								overcast	warm and humid	27	20		7.0	6.5	6.6	6.6	72.1	7.5	0.1999		0.1999			
	Site C	8/18/2006	14:45	Macoby Creek	Bridge on Kraussdale Road, SW Kings Highway								overast	humid	27	22		8.2	8.4		8.3	95.3	8.0	0.1999		0.1999			
	Site F	8/20/2006	10:40	Macoby Creek Tributary	300 m (northeast) from Kings Hwy, creek parallel to Titlow Road								light clouds/sunny	humid	30	21.5		6.1	6.2	6.2	6.2	70.4	7.5	0.1999		0.1999			
																					378.0	3429.4	290	11.5972					
	Stoney Run-ephemeral – dry creekbed in August			Stony Run	Bridge over Stony Run at Buck Road																								Dry creek bed
	Stoney Run	8/5/2006	12:30	Stony Run	Bridge over Stony Run at Buck Road								sunny	hot and humid	21	22		4.0	4.0		4.0	45.9	6.5	0.1999		0.1999			

DRBC Data																													
Site ID	Date	Time	Initials	Replicate? (Y or N)	Secondary Station ID	REMAP site category	Surveyed By	Survey Type	County	Municipality	Lat	Lon	Photos?	Location Description	Residential	Commercial	Industrial	Cropland	Pasture	Abd Mining	Old Fields	Forest	Other	Other ID	Land Use Comments	Canopy Cover	Habitat Evaluated?	Habitat Score	Stream Type
20050510-1500-DRB	10-May-05	15:00	DRB	N	Macoby Creek trib 01426 (Stony Run)	Primary	RL, GS	REMAP 6-Kick	Montgomery	Upper Hanover Twp	40.38237	-75.46195	Y	N. Geryville Pike off Rt 63W to Sweetwater Golf Course. Park at golf course, walk upstream of rd. crossing about 500 ft.	10%	0%	50%	0%	0%	0%	0%	40%	0%	n/a	LB: forest to residential lot at DS end; RB: Junkyard (U-Pull-It) all along stream, many auto parts in creek. Some bank stabilization using old tires.	P	Y	151	FW

Total Alkalinity (mg/l)	Total Alkalinity MDL	Temp (C)	DO (mg/l)	pH	Conductivity (umhos/cm)	Instruments	Reason Station Not Used	Channel Evolution Status	Photo Notes	Other Notes	D16	D35	D50	D84	D95	silt/clay	sand	gravel	cobble	boulder	bedrock	cw/ww	reach length yds	width yds	Riffle/Pool Frequency (channel widths per riffle)	riffle%	pool%	run%	score 1: instream fish cover
non-detect	8	19.24	8.26	7.60	144	Alk: YSI 9100 Photometer; Others: Hydrolab Quanta Multiprobe	n/a	Stage IV: aggrading, stabilizing. Channel is too wide to carry sediment load, low flow channel is not fully formed. Numerous areas of bedrock prevented channel incision.	DS/US series in DS to US order	Size classes estimated, no pebble count. Stream exhibits fairly low flow, flashy hydrology, probably goes dry in summer. Substrate is bedrock overlain by boulder, cobble, gravel. Stream is step pool channel with abundant woody debris.	n/a	n/a	n/a	n/a	n/a	0%	5%	20%	35%	10%	30%	ww	30	2	3.0	70	20	10	11

score 2: epifaunal substrate	score 3: embeddedness	score 4: velocity/depth regimes	score 5: channel alteration	score 6: sediment deposition	score 7: freq of riffles	score 8: channel flow status	score 9: condition of banks	score 10: bank vegetative protection	score 11: grazing or other disruptive pressure	score 12: riparian width	total habitat score
9	17	12	13	4	18	8	16	13	16	14	#REF!