



Nittany Valley Environmental Coalition  
c/o Treasurer David Stone  
539 E. Nittany Ave.  
State College PA 16801

**PRESS CONTACT:**

David Roberts, Working Group Chair  
NVEC Working Group for Spring Creek Watershed Action Plan (SCWAP)  
814-769-0550  
[nvec2018@gmail.com](mailto:nvec2018@gmail.com)

**FOR IMMEDIATE RELEASE - June 25, 2018**

**Position Statement:**  
**Spring Creek Watershed Action Plan**

Nittany Valley Environmental Coalition strongly supports the Spring Creek Watershed Commission's efforts to update and complete a **Spring Creek Watershed Action Plan**. An early phase of this integrated watershed management plan was last updated in 2003.

We further strongly encourage all interested watershed stakeholders to participate in the Commission's Tuesday, **July 10, 2018 meeting** to kick off the process of updating and completing the Spring Creek Watershed Action Plan, to be held at 6:30 p.m. at the Calvary Baptist Harvest Fields building at 150 Harvest Fields Drive, Boalsburg. (Entrance is via Discovery Drive off Business Route-322) Spring Creek Watershed Commission asks participants to **register by Tuesday, July 3**: <https://goo.gl/forms/qQaCsvmDcV4lbVNc2>

*Summary:*

The Spring Creek Watershed needs an integrated watershed management plan<sup>1</sup>, defined by the international Global Water Partnership as: "a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems."

---

<sup>1</sup> For a general overview of integrated water management, visit:  
<https://www.americanrivers.org/conservation-resources/integrated-water-management/what-is-integrated-water-management/>

Regional and municipal governments and authorities were established to protect public health and safety, including protection and conservation of public water resources.

But recent public disagreements, incursions of development into sensitive, protected areas, aging infrastructure with excessive water loss, and a lack of cooperation between townships demonstrate the urgent need for a science-based regional watershed management plan.

The current actions by the Spring Creek Watershed Commission present a great opportunity for our communities and our representatives to work together to craft an enforceable watershed management plan.

Open and inclusive public involvement is key to project success.

Our understanding is that drafting, adoption and enforcement of a Spring Creek Watershed Action Plan is a multi-phase, multiyear process in which public and stakeholder information and discussion sessions are crucial, bringing people together to discuss, analyze, and resolve water use issues and challenges. Stakeholders include decision-makers and key water advocacy organizations, and the public includes everyone living in the watershed.

Phase 1 – Includes public meetings to clarify our community understanding of the entire system – public water supplies and natural aquatic systems – as one integrated system; to study and evaluate water system risks from land development and from climate-driven impacts; to develop general action plans to protect and conserve existing water resources from further degradation; and to develop action plans – including a water budget – designed to measurably improve and restore streams, wetlands, aquatic ecosystems and water-dependent terrestrial populations, including but not limited to humans.

Phase 2 – Includes development of specific “green” and “blue-green” infrastructure projects<sup>2</sup>; funding mechanisms for those infrastructure projects; and adoption of the final Spring Creek Watershed Action Plan by the participating municipalities and municipal authorities such as the State College Borough Water Authority and the University Area Joint (Sewer) Authority.

Phase 3 - Includes updating municipal codes with enforceable legislation and policies – such as zoning code updates and stormwater management ordinance updates – to implement the Spring Creek Watershed Action Plan at the municipal and municipal authority level.

---

<sup>2</sup> From Wikipedia: Green Infrastructure or blue-green infrastructure refers to projects that help “solve urban and climatic challenges by building with nature. The main components...include stormwater management, climate adaptation, less heat stress, more biodiversity, food production, better air quality, sustainable energy production, clean water and healthy soils, as well as the more anthropocentric functions such as increased quality of life through recreation and providing shade and shelter in and around towns and cities.”

*Nittany Valley Environmental Coalition's mission is  
to protect our constitutionally-guaranteed environmental rights as Pennsylvania citizens.*

Some aspects of a watershed plan will be enforceable as soon as the regional plan is adopted by the participating municipalities and municipal authorities, and before adoption of specific implementing local regulations, through state oversight of local development proposals by the Pennsylvania Department of Environmental Protection (PA-DEP) under legislative statutes.

For example, a complete, adopted regional Spring Creek Watershed Action Plan would be considered “Local Planning” under Act 537, related to sewage management, which requires all proposed sewer projects to serve existing and proposed land development projects to be assessed for consistency with local planning. Similarly, the interstate Susquehanna River Basin Commission would likely refer to a complete, adopted Spring Creek Watershed Action Plan when evaluating consumptive use permit applications such as the Nestle bottling facility proposed earlier this year.

Nittany Valley Environmental Coalition therefore asks for citizen support and engagement in the drafting and adoption a regional Spring Creek Watershed Action Plan; in the drafting and adoption of appropriate local municipal legislative and regulatory plan-implementing actions; and in oversight and enforcement of the adopted plan and implementing legislation by local, county, state and inter-state governmental agencies in the years to come.

### *Our Water is Vulnerable*

Centre County has limited, vulnerable water supplies.

The need to protect and conserve our public water resources is growing more urgent from the real threats we face including:

- Risk of depletion of local water supplies and lowering of water tables
- Increased potential for groundwater contamination
- Projections of drought, flooding and other severe weather effects of climate change. For example, droughts reduce the available water stored in the aquifers, heat surface waters and reduce stream flow. Flooding scours streambeds, damages infrastructure, destroys aquatic habitat, and transports contaminants into water supplies.
- Development upon sensitive aquifer recharge areas
- Fragile health of Spring Creek water basin
- Loss of forested water recharge areas
- Degradation of riparian stream systems
- Reduction of flow to named and diffuse fresh water springs
- Reduction of gaining stream inflow
- Increased groundwater withdrawals
- Reduction of cold water habitat for native trout

*Nittany Valley Environmental Coalition's mission is  
to protect our constitutionally-guaranteed environmental rights as Pennsylvania citizens.*

- Increased surface and stormwater runoff from impervious surfaces
- Growing wastewater treatment needs
- Aging infrastructure

Centre County will continue to face demands to tap our water resources and proposals to expand development into sensitive and fragile watershed areas.

*State and local water-protection laws and systems are weak*

The Pennsylvania Constitution states that:

“The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.” (Pa. Constitution, Article I, Section 27).

However, our water laws are mostly based on old common law precedents and common law court decisions with few statutory provisions from our state legislators.

These common law precedents did not envision the impacts, challenges and opportunities presented in the 21st Century.

In addition, Pennsylvania generally follows the “American Rule” on water use. However, “The American rule is not designed to deal with conflict between competing users or with drought conditions. Its provisions usually mean that those with the deepest wells and most powerful pumps get the most water.” (State Water Plan, 1976; Weston, 1990).

The 1996 League of Women’s Voters PA water law summary identified a number of problems with Pennsylvania’s laws including:

- no mechanisms to address potential problems for our future water needs
- no guarantee that our water rights will continue undiminished
- no provision for resolution (other than litigation) of competing water uses
- no provision for increased per capita demand for water
- no provision for conservation of water
- no provision for dealing with increase of conflicts during droughts
- a fragmented system of water management.

Our local existing water management plans are also weak and unenforceable. Centre County has around 48 separate water authorities with independent water management systems and decision-making policies.

Municipal code provisions are fragmented across township boundaries and are failing to function as representative of the general public good with regard to our water resources, which are physically shared across political boundaries.

*How a Spring Creek Watershed Action Plan can help.*

An integrated watershed management plan will provide an equitable, science-based framework for towns and municipal authorities within the Spring Creek Watershed to manage these threats and to implement the decision-making processes necessary for the conservation, protection, and beneficial use of our public water into the next century.

A successful integrated water plan is a pathway forward and the means for our government representatives to make fair, common sense decisions while considering the water needs of all local stakeholders – including human and other terrestrial animal populations and aquatic ecosystems.

Ideally, the plan will protect our water while helping to avoid potential disagreements between the public, businesses, and our local decision-makers on water management issues.

The benefits of a strong, clear, enforceable regional Spring Creek Watershed Action Plan – and local implementing legislation – include:

- Availability of fresh, potable water for Centre County's many and diverse needs
- A clear approval mechanism for water use
- Integration of water management across township and municipal boundaries
- Protection and conservation of watershed basins
- Proper management of public water resources
- Equity for shared stakeholders
- Funding mechanism for infrastructure maintenance and expansion,
- Restoration and improvement of currently degraded natural aquatic habitats
- Preservation of recharge areas
- Increased tourism revenues
- Enhancement of community recreational opportunities
- Science based monitoring systems to measure benchmarks and progress
- Plans to counter potential drought and flood conditions
- Clearly defined and established goals
- A mechanism to assure abundant water resources for the next 50 years.

For more information or to get involved with NVEC's work supporting a Spring Creek Watershed Action Plan, please contact David Roberts, Working Group Chair, NVEC Working Group for Spring Creek Watershed Integrated Management Plan, at the contact information listed above.

## Water Resource and Watershed Planning Documents

For a general overview of integrated water management, visit:

<https://www.americanrivers.org/conservation-resources/integrated-water-management/what-is-integrated-water-management/>

### Laws and Codes:

- PA Constitution, Article 1 Section 27: PA Environmental Rights Amendment
- PA Code Title 27 Environmental Resources Chapter 31: Water Resource Planning
- PA Code 93: Water Quality Standards
- PA Clean Streams Law, Act 394, 1987
- Federal Clean Water Act 33, 1972
- Susquehanna River Basin Compact, 1972
- A Short Review of PA Water Law, DEP, 2006
- PA Public Water System Report, DEP 2016
- PA Water Resources Report 70: Summary Groundwater Recharge Estimates in PA 2000, USGS
- Surface Water Identification Protocols: Monitoring Guidelines, DEP
- Planning and Regulation in Susquehanna River Basin, Susquehanna River Basin Commission, 2014
- PA Water Planning Resources, Act 220, 2002
- Pennsylvania Municipalities Planning Code, Act of 1968

### Plans and Guidance

- Spring Creek Watershed Plan, Phase I, Clearwater Conservancy
- Spring Creek Watershed Association and Clearwater Conservancy Status Report, 2015
- Spring Creek Watershed Atlas, Spring Creek Watershed Association, 2017
- Pa Integrated Water Quality Monitoring and Assessment Report, DEP, 2008
- Centre County Comprehensive Plan, 2018
- PA State Water Plan, DEP
- Nittany Valley Region Official Comprehensive Plan, 2004
- Fishery of Spring Creek: A Watershed Under Siege, PA Fish and Boat Commission, 2011
- Spring Creek Canyon: Master Plan, Management Plan, and Implementation Effort, Clearwater Conservancy, 2008
- Clearwater Conservancy Sample Spring Protection Measures
- From Drench to Dry: Comparing 2011 and 2012, Spring Creek Watershed Association
- Chesapeake Bay Watershed Stewardship Exchange, Chesapeake Bay Program, 1996
- Brook Trout Conservation Plan, Countryside Institute, 2016
- Eastern Brook Trout of PA: Roadmap to Restoration, PA Council Trout Unlimited

*Nittany Valley Environmental Coalition's mission is  
to protect our constitutionally-guaranteed environmental rights as Pennsylvania citizens.*

- Water Resources Monitoring Project, Clearwater Conservancy, 1997
- Instream Flow Council Instream Flow Needs, American Fishery Society Vol I-II, 1976
- Protecting & Restoring Rivers & Lakes North America, Instream Flow Council, 2018
- PA Habitat Restoration Program, Trout Unlimited, 2018
- Natural Resources Surface Waters, Centre County Government, 2018
- Aquifer Testing Guidance, Susquehanna River Basin Commission, 2007
- Reduced Stream Flows, Trout Unlimited, 2018
- Critical Aquifers Recharge Areas: Guidance Document, PSU
- Climate Change and Riverine Cold Water Fish Habitat in the Northeast: A Vulnerability Assessment Review, Manomet Center for Conservation Sciences and National Wildlife Federation, 2013
- Ecological Drought in the Northeast US, Northeast Climate Center Workshop 2016

Science:

- The Fishery of Spring Creek: A Watershed Under Siege, PA Fish and Boat Commission, 2011
- Hydrological Catchment Area of a Chain of Karst Wetlands in Central PA, Society of Wetland Scientists, 2003
- Hydrogeological Setting and Model for the Spring Creek Basin, Centre County PA, USGS 2005
- USGS: Effects of Groundwater Development on Groundwater Flow To and From Surface Water Bodies
- USGS: Groundwater and Surface Water: A Single Resource, Circular 1139, 1998
- USGS: Science in Your Watershed
- USGS: Natural Process of Groundwater and Surface Water Interaction
- USGS: National Field Manual for Collection of Water Quality Data 2006
- USGS: Hydrological Cycle and Interactions of Ground and Surface Water
- General Hydrology: Gaining Streams, Metrocouncil.org
- Karst Springs, International Association of Hydrogeologists, 2018
- Karst Hydrology, Engineering Geology, 2002
- Mapped Karst Features in Centre County PA, DCNR
- Sinkhole Fact Sheet, DEP
- The Science of Spring Water, PSU 2002
- Fluxes in Groundwater Systems: Water Science and Society, PSU 2018
- Groundwater Resources Spruce Creek Determining Sources of Water and Contaminants to Wells in a Carbonate Aquifer Near Martinsburg, Blair County, Pennsylvania, By Use of Geochemical Indicators, USGS
- Analysis of Anthropogenic Contaminants, and Simulation of Ground-Water Flow, USGS
- Hydrogeological Analysis, Gatesburg Formation Hydrogeological Setting, USGS
- Gatesburg Formation Inflow Stream Studies for PA and MD, Susquehanna River Basin Commission
- Seasonal Fluctuation in the Chemistry of Limestone Springs: A Possible Means of

- Characterizing Limestone Aquifers, Journal of Hydrology
- PSU Eastern Brook Trout of PA: Roadmap to Restoration, PA Council Trout Unlimited
  - An Index of Biological Integrity of “True” Limestone Streams, PA DEP 2009
  - Conserving the Eastern Brook Trout: An Overview of Status, Threats, and Trends, Eastern Brook Trout Venture 2005
  - Brook Trout Conservation Plan, PA Bureau of Forestry, 2016
  - Pennsylvania’s Brook Trout Conservation Strategies

Economy:

- Center Region Parks and Recreation: Economic Impacts, 2017
- PA Fish and Game Commission, Report of \$1.2 Billion Dollar Fishing and Boating Revenues, 2018