Triple Divide Trail System

Rochester to Williamsport via the Genesee Valley Greenway, Pine Creek Trail, and Other Trail and Park Systems Across the Triple Continental Divide

Connecting urban, rural, and wilderness communities by greenways, blueways, and nature parks that promote conservation of the Genesee River and Pine Creek, outdoor recreation, and economic revitalization for ca. 230 miles from Lake Ontario to the Susquehanna River.

Strategic Plan

Triple Divide Trail System

Strategic Plan

To restore, protect, and enjoy the
Genesee River and Pine Creek by
raising their profile as resources for
outdoor recreation and sustainable economic development

Prepared with gracious assistance

from

agency directors, elected representatives, organization managers,
business owners, farmers, professors, photographers, and others in
federal, state, regional, county, and municipal agencies,
public and non-profit organizations, businesses, educational institutions,
and other groups in NY and PA

for the

Genesee River Wilds Project

www.geneseeriverwilds.org
Belmont, NY
2011

by

Allen Kerkeslager, Associate Professor
Religions of the Ancient World
Saint Joseph's University, Philadelphia, PA, 19131-1395

**Cover photo, family rafting on Pine Creek, PA:
Courtesy of Jon Dillon, Pine Creek Outfitters.**

**Cover photo, jogging and bicycling on Genesee Valley Greenway, NY:
Photo by Kristen Bennett, courtesy Fran Gotcsik and Joan Schumaker,
Friends of the Genesee Valley Greenway.**

Acknowledgements

Numerous studies have argued that kindness, generosity, and cooperation express universal human tendencies rooted in our evolutionary heritage (e.g., Hart and Sussman 2009; De Waal 2005; Wilson 2002). Normal expectations that this might suggest have been exceeded by the individuals who helped develop the program outlined in this document.

Special thanks are due to those who have made the most frequent or most significant contributions to dialogues about this project, in some cases stretching back for more than two years. These include Russell Biss (New York State Department of Environmental Conservation); Charlotte Dietrich (Potter County Planning Commission); Kier Dirlam (formerly Village of Wellsville, now Allegany County Planner); John Foels (Allegany County Office of Development); Gretchen Gary (Allegany County Soil and Water Conservation District); Ray Goll (New York State Office of Parks, Recreation and Historic Preservation); Eric Grace (Genesee Valley Conservancy); Lee Gridley (Allegany County Planning Commission); William Hart (Greater Allegany County Chamber of Commerce and Chair of the Genesee River Wilds Committee); Sherry Grugel (Greater Allegany County Chamber of Commerce and Allegany County Tourism Office); Meredith Hill (Pennsylvania Department of Conservation and Natural Resources); Charles Knauf (Monroe County Department of Health); Matt Marusiak (North Central Pennsylvania Regional Planning and Development Commission); Michael Miecznikowski (New York State Office of Parks, Recreation and Historic Preservation); Mark Murawski (Lycoming County Planning Commission); Richard Parker (New York State Office of Parks, Recreation and Historic Preservation); Patience Reagan (Allegany County Office of Development); Joan Schumaker (Friends of the Genesee Valley Greenway); Steve Winslow (Army Corps of Engineers, Mt. Morris Dam); and Judy Kerkeslager (always and all ways).

Three others who have more than compensated for the fact that I have known them for less than a year include John Buerkle (Pashek Associates); Michael Kotyk (Pashek Associates); and most notably Dr. Jonathan Schull (Rochester Institute of Technology), who has dramatically increased the pace of development. Jon's colleagues in the Rochester Cycling Alliance, especially John Curran (Southwest Rochester Riverfront Planning Commission), Richard De Sarra (New York Bicycling Coalition), and Dr. Scott MacRae (University of Rochester) have proven to be indefatigable allies.

People who have played key roles despite less frequent, more indirect, or more recent interaction include Michael Burke (Greater Allegany County Chamber of Commerce); Scott Cornett (New York State Department of Environmental Conservation); Curtis Crandall (Allegany County Legislature); Ray DeTine (Belmont Betterment Association); Brent Kelley (Upper Genesee Trout Unlimited); Alexander MacDonald (Pennsylvania Department of Conservation and Natural Resources); Eric Massa (US House of Representatives); Richard Perrin (Genesee Transportation Council); Robert Reinhardt (New York State Office of Parks, Recreation and Historic Preservation); Frank Regan (Rochester Sierra Club); Brian Slack (Genesee/Finger Lakes Regional Planning Council); Donald Sweezy (New York State Department of Transportation); Robert Torzynski (Genesee Transportation Council); Jerry Walls (formerly Lycoming County Planning Commission); James Weaver (Tioga County Planning Commission); Catherine Young (New York State Senate); and David Zorn (Genesee/Finger Lakes Regional Planning Council).

Other support came from Harvey Botzman; Craig Braack; Dr. John Buckwalter; Teresa Carroll; Robert ("Cobb") Chamberlain; William Dibble; Jack Fleckenstein; Erica Fleischman;

Dr. Michele Hluchy; Donald Kaake; Dr. Thomas Kettlecamp; Jason Marmon; Paul Sawyko; Fred Sinclair; Nathan Sermonis; and Wendy Skinner. Colleagues at Saint Joseph's University, especially Dr. Shawn Krahmer, frequently expressed encouragement despite the stretch outside my normal focus on prehistoric and ancient cultures. Photographers who have generously given permission to use their work are acknowledged in appropriate places. The regrettable shortage of photographs with more human diversity is not their fault. It is a symptom of one of the many problems that this plan addresses.

The list would grow much too long if it included the many others who kindly answered questions or provided indirect support. These include farmers, landowners, and others whose names are omitted to preserve their privacy. I can only apologize to those whose names have been omitted purely by accident or because the individual is one of the many with whom I have had minimal contact despite their own toil on this project.

The individuals and organizations mentioned above include specialists with expertise far beyond my own. They are not responsible for the errors, misguided rhetoric, and other faults found in this document. Comments, corrections, and criticisms are welcomed so that it will be useful until replaced by better materials produced by more qualified people.

In continued collaboration,

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Note on Final Release

Comments on the previous draft suggested only very minor adjustments that were easily incorporated without significant changes in content or layout. The bibliography now includes new planning documents that refer to the Triple Divide Trail System. These were produced for Rochester (Sprinkle et al. 2011, p. 7); the Rochester-Genesee-Finger Lakes region ([Rochester Cycling Alliance et al.] 2010, pp. 7, 10-11); and all of NY (*2010 Statewide Trails Plan*, NYSOPRHP 2010b, pp. 14, 41, and maps, Figs. 1 and 4). These complement earlier documents already mentioned in the previous draft (e.g., North Central PA Regional Plan. and Devel. Comm. 2010, Potter County, p. 3-179 and map trails nos. 1 and 7; PA DCNR with Larson Design 2010; Lycoming County Plan. Comm. et al. 2006, in general and pp. 5-4, 10, 17; 9-9, 10; Slack et al. 2010). These sources attest to growing cooperation across state lines on this project.

A.K.

March 2011

Triple Divide Trail System
Strategic Plan

Contents

Preface

Purpose and Limitations of this Document

This document is a strategic planning tool for connecting conservation and recreational systems in Pennsylvania and New York. The program it describes is already being incorporated into state and regional plans in both states. This plan is being implemented by default, because it builds on work already being done on existing recreational systems. The new resources that become available by working together across state lines are only beginning to be tapped.

This plan is based on planning commission meetings, conversations with officials in public agencies, published reports, and many other sources. But it is neither a legal document nor a technical committee report. It is only a provisional working tool for the agencies, legislative bodies, businesses, landowners, and other groups that would benefit from collaboration. The purpose of this document is to make it easier to communicate across geographical distances, maximize resources, understand how parts fit into the whole, and secure grants and other aid.

One limitation of this plan is the absence of any significant treatment of trail and recreational systems associated with the Allegheny River. This is despite the fact that the Allegheny is one of the rivers referenced in the very name of the Triple Divide Trail System. This omission was due to practical considerations (see below, "Introduction"). This does not preclude giving more attention to connections with the rich resources along the Allegheny River at some future time. This is, however, far beyond the scope of the present document.

Executive Summary

Building on Previous Work with an Integrative Approach

The Triple Divide Trail System will be a unified conservation and recreational system stretching ca. 230 miles along the Genesee River and Pine Creek from Lake Ontario in Rochester, NY, to the Susquehanna River in Williamsport, PA. The name derives from its passage over a triple continental divide separating the headwaters of three national watersheds: the Allegheny River, the Genesee River, and the Susquehanna River (West Branch and Pine Creek). This recreational system is being created by connecting existing rail-trails (greenways), water trails (blueways), and nature park areas, including Letchworth State Park (NY) and Pine Creek Gorge (PA). The approach is integrative and cost effective. It combines water conservation, natural flood control, outdoor recreation, environmental education, and sustainable economic development, including new jobs in construction and eco-tourism.

Strategies and Phases

(1) Improve existing trails for bicycles and existing canoe/kayak launches along the Genesee River and Pine Creek. Existing trails include the Genesee Riverway Trail in Rochester (NY); Genesee Valley Greenway (NY); Park Road in Letchworth State Park (NY); WAG Trail (Wellsville-Addison-Galeton rail-trail, from Wellsville, NY, south); Pine Creek Trail (PA); and Lycoming County Trail and Bikeway in Williamsport (PA). Some canoe/kayak launches on Pine Creek and most on the Genesee River are rough and informal. This existing recreational infrastructure needs: (a) more signs; (b) more parking lots; (c) more complementary infrastructure, such as pavilions, restrooms, campsites, and trail shelters; (d) better surfaces for bicycle trails; (e) improved launches for canoes and kayaks.

(2) Construct new canoe-kayak launches with signs, parking lots, and other complementary infrastructure to improve blueway (water trail) systems along the Genesee River and Pine Creek. Often these can be built at low cost near bridges and other public sites, with costs minimized further by incorporation into new bridge construction. In other cases this requires purchase of land or easements.

(3) Add linking trails to connect existing trails (above) together to form a multi-use rail-trail stretching from Rochester to Williamsport along the Genesee River and Pine Creek. Only a few short sections of the entire 230-mile system do not already have a trail completed or under development. In most of these cases old railroad beds or other existing infrastructure will expedite trail construction.

(4) Add inexpensive forested streamside nature parks that simultaneously expand protections for the stream system while providing immediate jobs in construction, recreational infrastructure for long-term eco-tourism, and facilities for environmental education. These include camping shelters, restrooms, pavilions, interpretive signs, wildlife-viewing platforms, and educational kiosks.

(5) Continue adding forested riparian (streamside) buffers along the Genesee River and Pine Creek that offer water conservation, wildlife habitat, and natural flood control while accommodating existing development. The Genesee River is one of the largest rivers feeding Lake Ontario. Pine Creek is the largest tributary of the West Branch of the Susquehanna River and thereby has a major impact on Chesapeake Bay. Agricultural nutrients, industrial toxins, costly flooding, and risk of overuse will be reduced by buffers reaching at least 300 feet wide on each bank (at least 100 feet for small tributaries) where existing development allows. In some places this can reach 1/4 mile, which is the average recommended for the highest class of federally protected rivers. In other sections a narrower buffer may be a more realistic goal. Local support can be generated by funds for purchase of land, easements, zoning costs, and sustainable recreational development in these buffers (above).

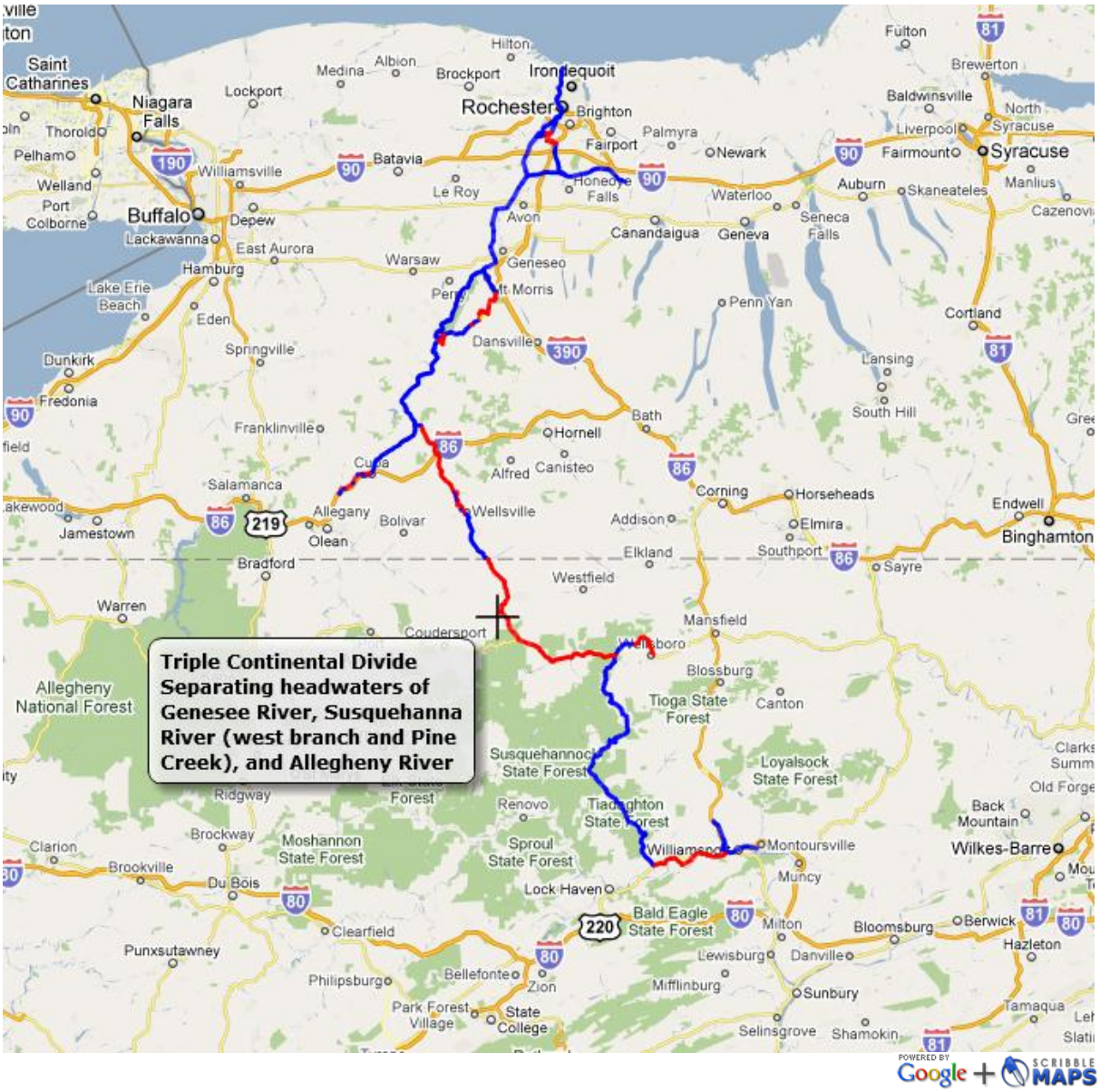
1. Maps of Entire Trail System: Rochester, NY, to Williamsport, PA (Lake Ontario to Susquehanna River)

Beach on Lake Ontario at Mouth of Genesee River, Rochester, NY
Photo courtesy Cyclopedia Rochester and Dr. Cappy Collins, University of Rochester

Triple Divide Trail System

Rochester to Williamsport via the Genesee River, the Triple Divide, and Pine Creek

Distance from Lake Ontario in Rochester to Susquehanna River in Williamsport, approx. 230 Miles.



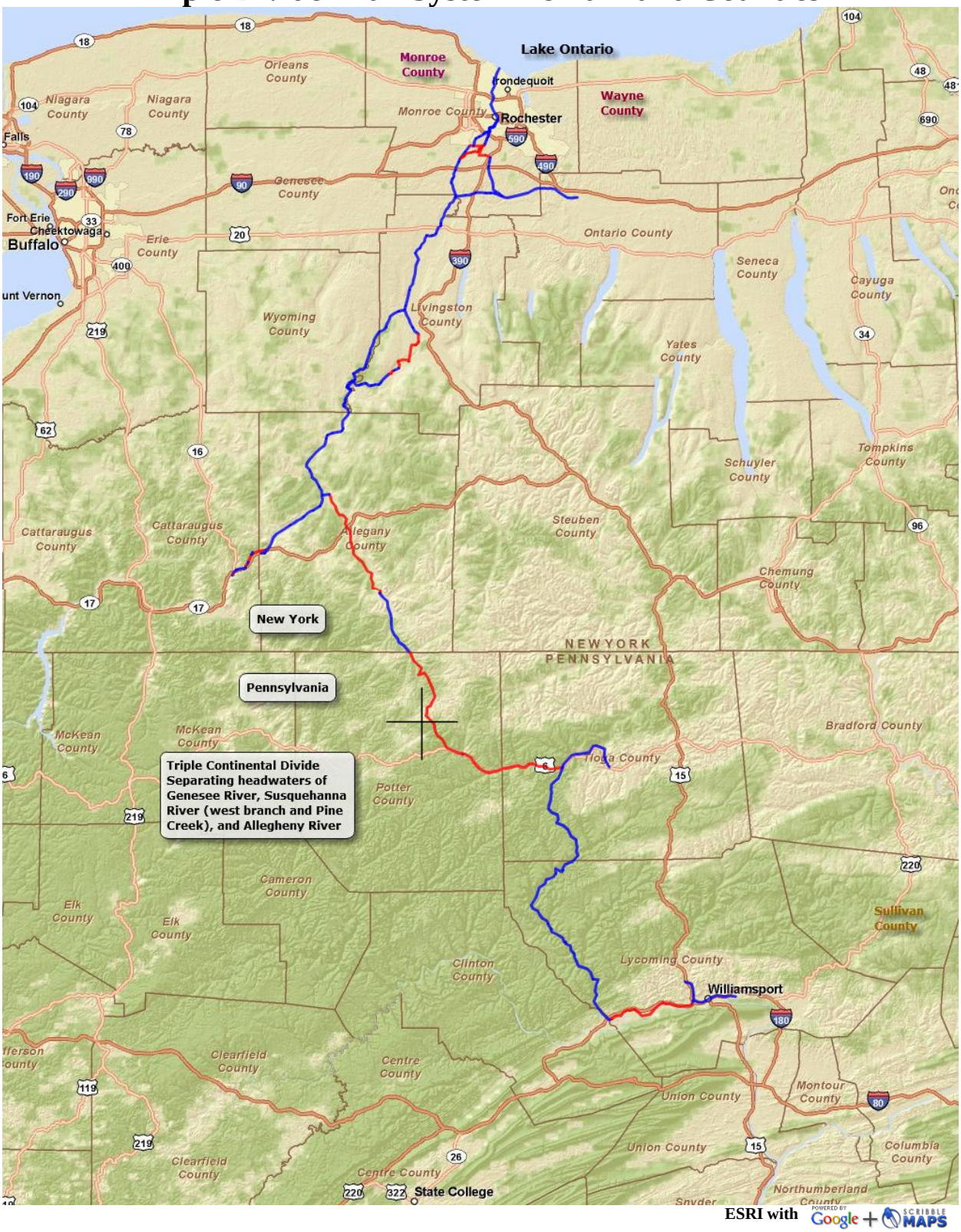
REVISED MAP, SEPTEMBER 1, 2010

Blue: Existing trails (completed or under development), including Genesee Riverway Trail (Rochester, NY), Genesee Valley Greenway (NY), Park Road in Letchworth State Park (NY), WAG Trail (trail on Wellsville-Addison-Galeton Railroad bed, from Wellsville, NY, to NY/PA state line, acquired by NYSDEC 11/2009), Pine Creek Trail (PA), Lycoming County Trail and Bikeway (PA).

Red: Planned linking trails (currently requires temporary detours onto roads): Out of ca. 120 miles on NY side, only missing ca. 20 miles between Belfast and Wellsville in Allegany County, NY. Out of ca. 110 miles on PA side, only missing ca. 40 miles from NY/PA state line through Potter County and Tioga County, PA, to the Pine Creek Trail and ca. 15 miles from southern end of Pine Creek Trail to Lycoming County Trail and Bikeway in Williamsport.

Revised by Allen Kerkeslager with aid of state agencies, planning commissions, academic institutions, and other groups in NY and PA

Triple Divide Trail System Terrain and Counties



REVISED MAP, AUGUST 25, 2010

Blue: Existing trails (completed or in development). **Red:** Planned linking trails (requires temporary use of roads). Revised by Allen Kerkeslager with aid of state agencies, planning commissions, academic institutions, and others in NY and PA

2. Maps of Watersheds: Triple Divide Headwaters Region, Genesee River, and Pine Creek

Fly Fishing on Pine Creek in Galeton, Near the Triple Divide in Potter County, PA
Photo courtesy Curt Weinhold Photography

Triple Divide Headwaters Region,
North Central PA and Southwestern NY

Raising the Profile of Water Resources of National Interest
(Merits Federal Funding)

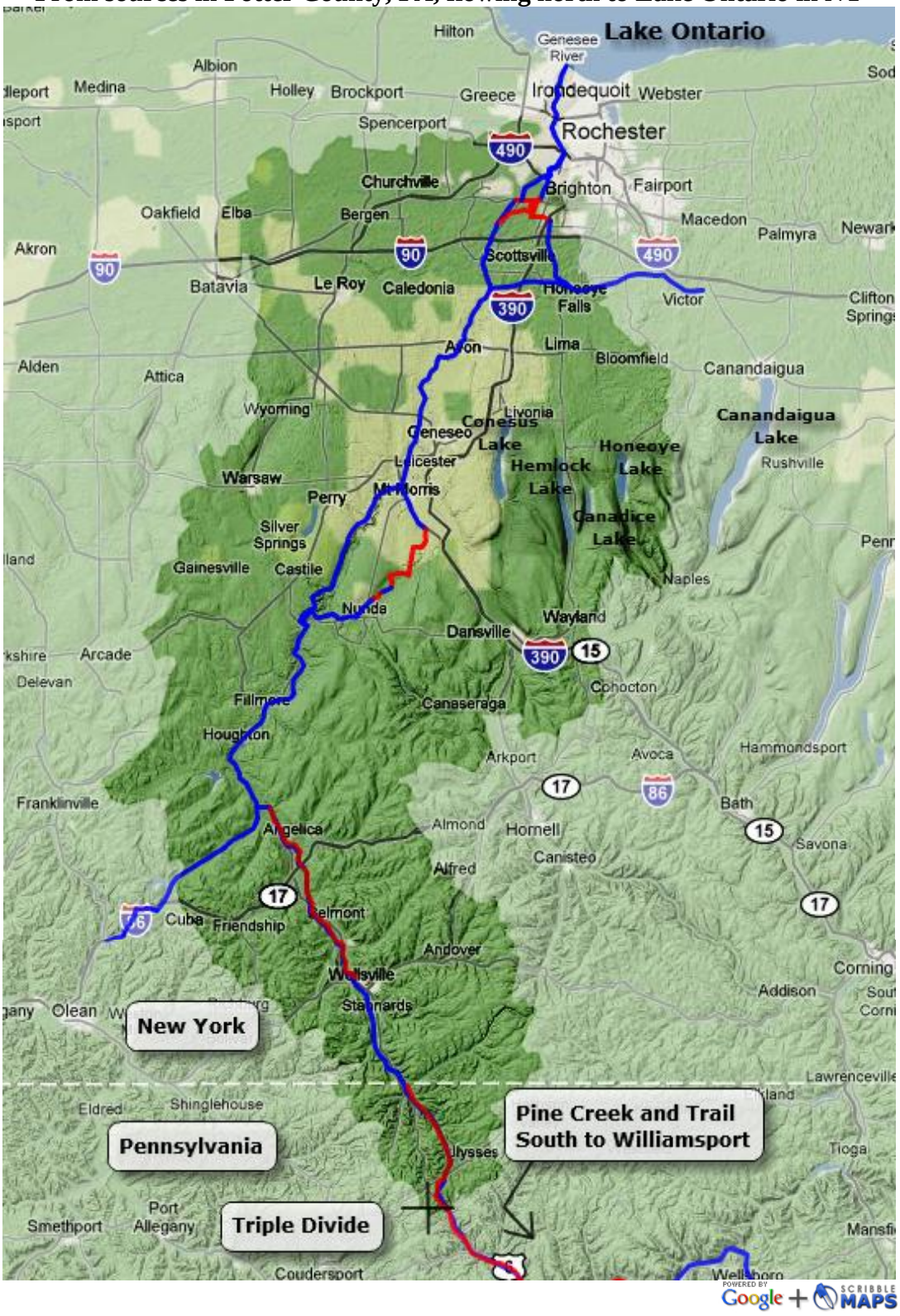
Allegheny River, Flows Southwest to Ohio River and thereby to Mississippi River

Genesee River, Flows North to Lake Ontario

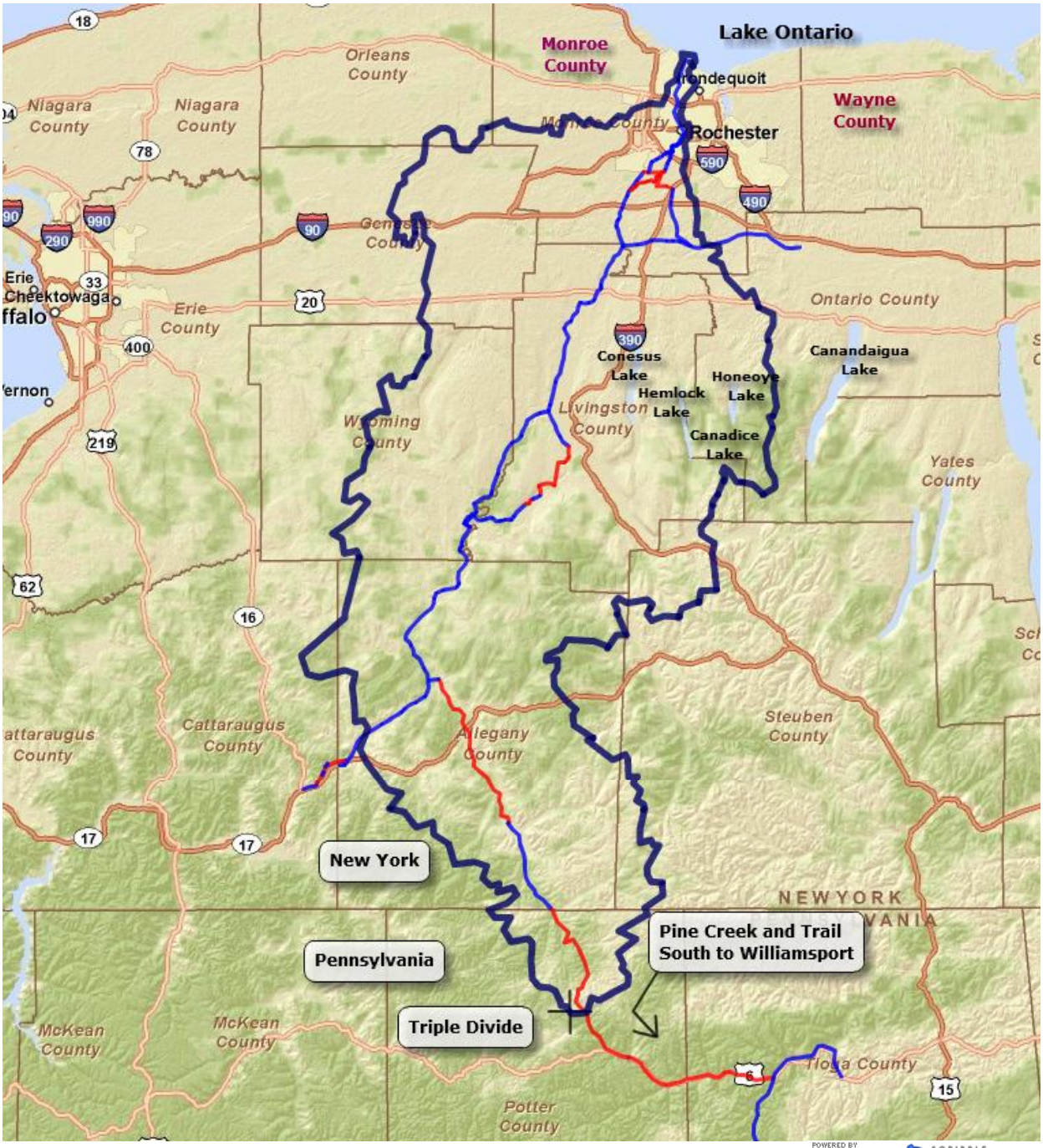
Susquehanna River (West Branch and Pine Creek), Flows South to Chesapeake Bay

Genesee River Watershed and Terrain

From sources in Potter County, PA, flowing north to Lake Ontario in NY



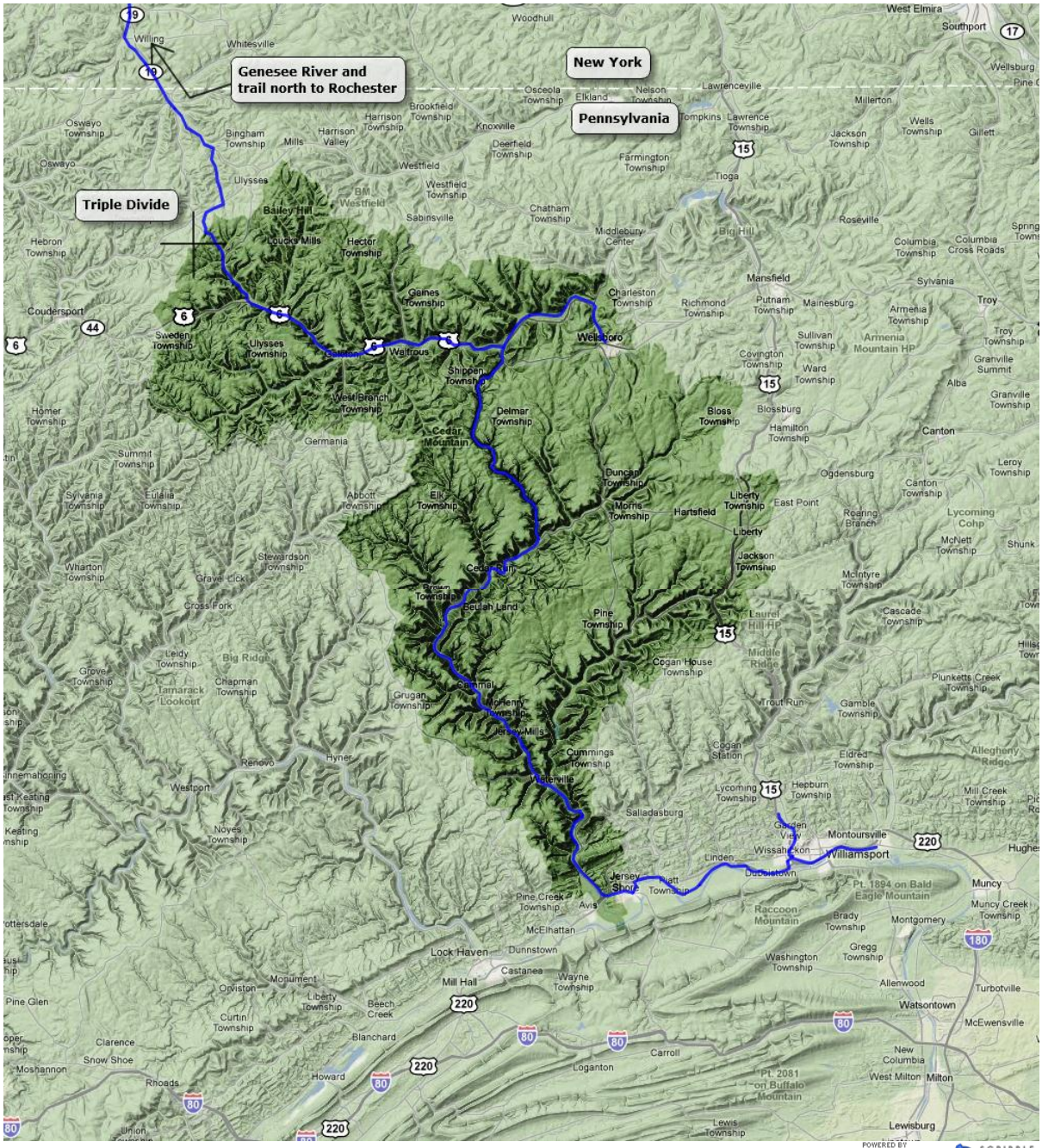
Genesee River Watershed County Boundaries (with Trail System)



For more on the Genesee River, see Helen Domske, Margy Peet, et al. (2002), *Lake Ontario Algae Cause and Solution Workshop Proceedings, Rochester, May 30, 2002*, http://www.monroecounty.gov/p/phe-OntarioAlgaeCauseWorkshop.pdf; Genesee/Finger Lakes Regional Planning Council, *Genesee River Basin Action Strategy* (2004), http://www.gflrpc.org/Publications/GenRiverActionStrategy.htm; Genesee/Finger Lakes Regional Planning Council et al., *2007 Genesee River Conference* (2007), http://www.gflrpc.org/GeneseeRiverConference.htm; Elizabeth Moran, John Roebig, et al. *The State of New York Lake Ontario Basin* (2000), http://www.fllowpa.org/statebasin.pdf

Trail System Inside Genesee River Watershed
From Lake Ontario in Rochester, NY,
upstream (south) to river's sources in Potter County, PA

Pine Creek Watershed and Terrain
From creek's sources in Potter County, PA, flowing southeast to its mouth at Susquehanna River just west of Williamsport, PA

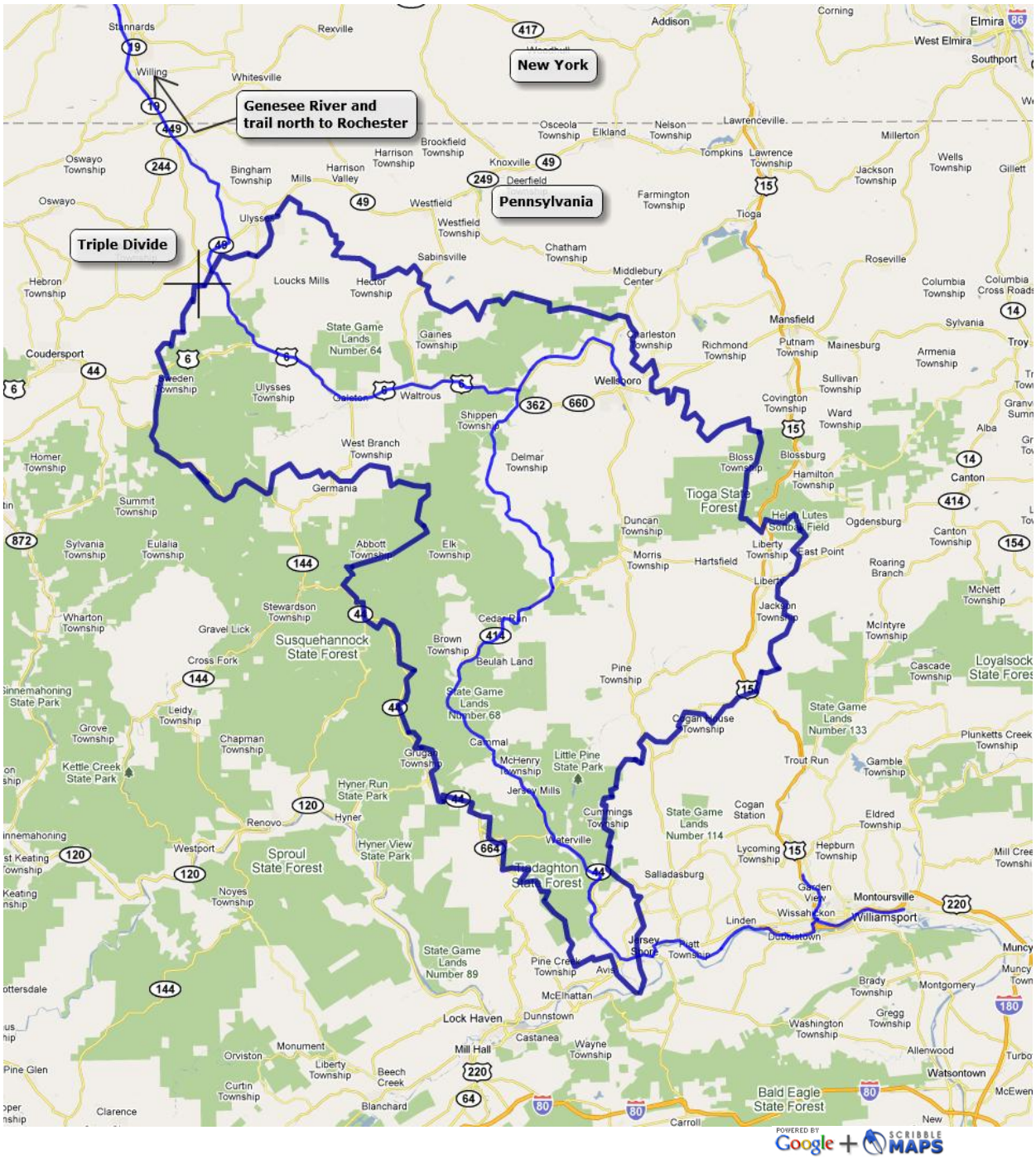


Note: This map does not distinguish parts of trail system only in planning stages from parts that are more fully developed. See trail maps above.

Pine Creek Watershed County Boundaries

For more on Pine Creek, see Carl Knoch and Patricia Tomes (2006), *Pine Creek Rail Trail 2006 User Survey and Economic Impact Analysis*, http://www.railstotrails.org/resources/documents/resource_docs/RTC_PineCreekGuide_web.pdf; Lycoming County Planning Commission et al. (2006), *The Comprehensive Plan for Lycoming County, PA, Phase II*, http://www.lyco.org/dotnetnuke/Home/PlanningandCommunityDevelopment/ComprehensivePlans.aspx; Pine Creek Watershed Council (2005), *Pine Creek Watershed Rivers Conservation Program*, http://www.npcweb.org/pinecreekfinal.html *and* http://www.pinecreekwatershedrcp.org/plan.htm. The map above does not distinguish parts of trail system only in planning stages from parts that are more fully developed.

Trail System Inside Pine Creek Watershed
From creek's sources in Potter County, PA,
to its mouth at Susquehanna River just west of Williamsport, PA



Note: This map does not distinguish parts of trail system only in planning stages from parts that are more fully developed. See trail maps above.

3. Introduction

Mission of the Triple Divide Trail System

To restore, protect, and enjoy the Genesee River and Pine Creek by raising their profile as resources for outdoor recreation and sustainable economic development.

Scope and Terminology

The *Triple Divide Trail System* is an emerging system of conservation, natural recreation, and sustainable economic development stretching ca. 230 miles from Lake Ontario in Rochester, NY, to the Susquehanna River in Williamsport, PA, by way of the Genesee River and Pine Creek. The system's conservation goals will be achieved through strategies that will recruit stakeholders who may be more interested in the recreational features or the potential for business development.

The name "Triple Divide Trail" derives from the associated trail's passage over *a triple continental divide* separating the headwaters of three watersheds of national significance: the Allegheny River, which empties into the Ohio River and thereby the Mississippi River; the Genesee River, which empties into Lake Ontario; and Pine Creek, which is the largest tributary of the West Branch of the Susquehanna River and thereby a major feeder of Chesapeake Bay. The most precise reference point for the triple continental divide is a site on a hilltop in Potter County, PA. But the entire headwaters region in north central PA and southwestern NY is more broadly implied in the phrase "triple divide."

The adoption of "Triple Divide Trail" to refer to the entire system from Rochester to Williamsport corresponds with the current transition to a more formal integration of this system into the planning documents of state, regional, and other agencies. Previously this system was often described with rough provisional terminology, such as "Rochester to Williamsport Greenway." This sometimes created confusion with designated routes for bicycles and automobiles that follow paved highways (e.g., I-390, US Route 15, or roads in the NYSDOT State Bicycle Route System). As a solution to such problems, the name "Triple Divide Trail" was suggested in a meeting on the NY side of the headwaters region. Formally identifying the system as "Triple Divide Trail" better signals a unique route along the Genesee River and Pine Creek by way of a point near their sources in PA. The name and its origin illustrate the collaboration across state boundaries implied in the trail system.

Calling it the "Triple Divide Trail *System*" accommodates the trail's incorporation of existing trails with established reputations. These include the Genesee Riverway Trail, the Genesee Valley Greenway, and the Pine Creek Trail. These will retain their names and corporate autonomy. Distinctive terminology for the trail system as a whole prevents disruption of current marketing and funding practices for these existing trails. At the same time, "Triple Divide Trail" creates a new profile to market and fund these trails by emphasizing their connections to a headwaters region shared by both the Genesee River and Pine Creek.

Many other local and regional trails capitalize on similar patterns of dual identity. For example, approximately 420 miles of the Finger Lakes Trail in NY is synonymous with a section of the 4600-hundred mile North Country Trail. Similarly, the Mid-State Trail in PA constitutes just one section of the nine-state Great Eastern Trail. In such cases, continued use of the historic name for the smaller section preserves local support, while association with the much larger system attracts the resources of outside stakeholders.

"Triple Divide Trail System" is also more comprehensive. The phrase "triple divide" cannot be explained without reference to the Genesee River and Pine Creek. The trail system includes *greenways* that follow these streams, i.e., conservation corridors with recreational trails for bicycles and other minimally invasive modes of transportation. It also includes two *blueways*, which refers to water trails

for canoes, kayaks, and other small watercraft. The Genesee River flows northward from the triple divide. Pine Creek flows eastward and southward. Yet these two blueways present a unique opportunity for conservation and recreation because they originate next to each other.

The allusion to three major national watersheds in the phrase "Triple Divide Trail" draws attention to their unique value. It reminds people in urban areas downstream that the majestic rivers that reflect their city skylines originate in a headwaters region that nourishes a sizeable proportion of the nation's population. The reference to a watershed marker that is "continental" in its implications calls upon stakeholders outside the region to protect these national water resources starting at their very sources.

"Triple Divide Trail" explicitly refers to a "trail" associated with this headwaters region. This implies an invitation to travel and experience the scenery, wildlife, and other natural resources along and in the Genesee River, Pine Creek, and the highlands where they both begin.

Like the name, the Triple Divide Trail itself showcases these natural resources. It invites eco-tourism and sustainable business development. This will protect these resources by offering economically productive alternatives to more destructive ways of addressing the economic needs of the surrounding communities. This is especially vital to the rural communities in the headwaters region. The vitality of these communities has much broader implications than their small size suggests. They guard the very sources of major rivers crucial to the large cities downstream. A large proportion of the nation's population will benefit if these headwaters communities are revitalized by investing in the Triple Divide Trail's program of conservation, recreation, and sustainable economic development.

History

Plans for a system of conservation and recreation stretching along the Genesee River and Pine Creek build on the demonstrated success of much older and established systems. Among these are the recreational resources of Lake Ontario and Rochester. Rochester is the third largest city in NY. The Genesee River cascades over three falls inside the city limits. The Genesee boasts another three spectacular falls upstream in Letchworth State Park in NY, which attracts from 700,000 to a million visitors per year. Recreational investments in Pine Creek Gorge in PA are more recent. But it has already become an economically productive system (Knoch and Tomes 2006; Tomes and Knoch 2009). Near its southern end is Williamsport, which is a hub for the many natural recreation areas around the city. These include the massive Susquehanna River Trail, which is being developed in both NY and PA.

The proposal to connect these and other recreational systems stretching along the Genesee River and Pine Creek all the way from Rochester to Williamsport was being discussed by various individuals at least as early as the spring of 2008. These initial discussions evolved into the Genesee River Wilds Project later that summer. Letchworth State Park and Pine Creek Gorge were two of the models that this project followed in articulating its program for combining conservation, recreation, and economic development. Each includes forested riparian (streamside) buffer zones with sustainable recreational infrastructure that attracts eco-tourism and other business. These riparian buffers improve water quality, enhance habitat for fish and wildlife, mitigate flooding and erosion, and reduce damage when inevitable floods do occur. It was emphasized that following the model of Letchworth State Park and Pine Creek Gorge for the more undeveloped sections of the Genesee River and Pine Creek would link these two mature recreational systems together. In addition, proposals for further work on the Genesee Valley Greenway, the Pine Creek Trail, and other trails along the Genesee River and Pine Creek were already being discussed by planning commissions in both NY and PA. These factors suggested creating a unified trail and recreational system from Rochester to Williamsport.

Discussions about this proposal in 2008 benefitted from the participation of appropriate specialists. These included administrators already managing some of the existing recreational systems that will be connected. Among them were officials in the New York State Department of Environmental Conservation (NYSDEC), the New York State Office of Parks, Recreation and Historic Preservation

(NYSOPRHP), the Pennsylvania Department of Conservation and Natural Resources (PA DCNR), planning commissions, state and county legislatures, and representatives of non-profit organizations, academic institutions, and other groups in both NY and PA.

Over the next two years, the proposal for connecting together trail and recreational systems along the Genesee River and Pine Creek was gradually incorporated into the official planning discussions of state, regional, county, and municipal organizations in both NY and PA. By the end of 2010 the system appeared in documents produced with aid from relevant agency headquarters in Albany and Harrisburg for planning at all points from Rochester to Williamsport. Thus while this document is only a rough working tool, the program it describes is already advancing with official support in both NY and PA.

Future Expansion into the Allegheny River Watershed?

One major limitation of this plan is the conspicuous absence of any significant treatment of trail and recreational systems associated with the Allegheny River. This omission may seem particularly egregious because the Allegheny River is implied in the very name of the Triple Divide Trail System.

This omission is due to three factors: (1) the history of the program, which began with the goal of connecting trail and recreational systems along the Genesee River and Pine Creek; (2) limitations in staffing, funding, and time, which make it impossible to pursue more fully the connections with systems along the Allegheny River; (3) the arguably greater need along the upper Genesee River and Pine Creek/West Branch of the Susquehanna River, which do not have the protections and recreational resources that the Allegheny River enjoys in Allegheny National Forest (PA) and Allegany State Park (NY).

This omission does not preclude giving more attention to connections with recreational systems along the Allegheny River at some future time. Appropriate agencies and planning commissions in NY and PA have already developed trails, nature parks, and riparian buffers that eventually may be joined to form a single system along the Allegheny River reaching from the site of the triple divide to Pittsburgh. Pittsburgh would be the obvious counterpart to Rochester and Williamsport in the system described in this document. A trail system to Pittsburgh would connect the Triple Divide Trail System to the Great Allegheny Passage and possibly other trail systems, such as trails being constructed along the Ohio River in Wheeling, WV.

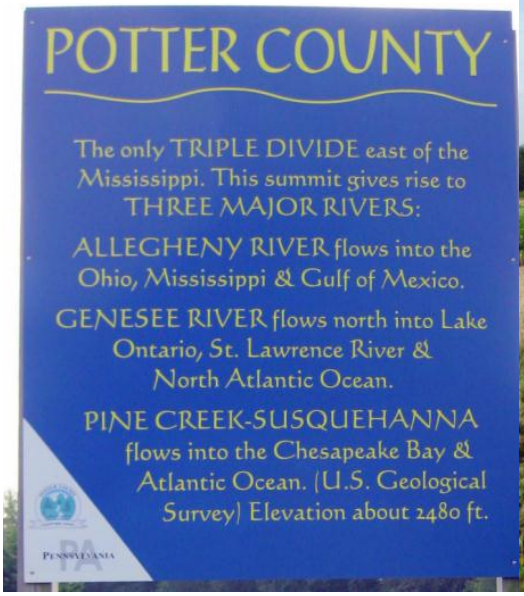
Resources for planning such connections are readily available. One of the maps that appear later in this document shows trails connecting to the Allegheny River near the site of the triple divide ("Planned and Existing Trails, Northeastern Potter County, PA"). More extensive planning for trails along the upper Allegheny River would require consultation of the source of this map, which is the new Greenways plan for the North Central Pennsylvania Regional Planning and Development Commission (www.ncentralgreenways.com). Additional resources include statewide trail maps (www.ptny.org; nysparks.state.ny.us/recreation/trails; www.pagreenways.org; www.explorepatrails.com). Allegheny National Forest (PA) and Allegany State Park (NY) are well documented. A recent addition to these resources is the new master plan for Allegany State Park and its trail systems (NYSOPRHP 2010).

Advocates of the Allegheny River who want to develop a branch of the Triple Divide Trail System along the Allegheny River would be warmly welcomed. Such a third branch would complement the two branches along the Genesee River and Pine Creek. It also would advance the goals of the Triple Divide Trail System. Should work on this third branch reach an advanced stage, the mission of the Triple Divide Trail System may have to be adjusted to incorporate a reference to the Allegheny River.

Integrating recreational systems along the Allegheny River into planning for the Triple Divide Trail System is, however, far beyond the scope of the present document. The current plan is more than enough to keep supporters busy for years to come. Connections to resources along the Allegheny River must be left to others.

Right:
Genesee River in Headwaters Region North of Triple Divide (Allegany County, NY)
Photo courtesy Sherry Grugel, Allegany County Tourism

Below:
Sign on Hill of the Triple Divide (Potter County, PA)



Above:
View North into the Genesee River Valley from the Hill of the Triple Divide

Left:
Pine Creek in Headwaters Region Southeast of Triple Divide (Tioga or Lycoming County, PA)
Photo courtesy Gary Tyson and Tiadaghton Audubon Society

4. Approach

Pragmatic, Inclusive, and Integrative Strategies

The approach taken in this program is pragmatic. It recommends relatively inexpensive strategies, compromise, accommodations for existing development, respect for the budgetary concerns of local legislators and landowners, and other practices that help generate support from as many stakeholders as possible. Most notably, the approach taken to environmental conservation emphasizes the integration of recreational development that will promote economic revitalization. This includes creating new jobs in construction of minimally invasive recreational infrastructure, promoting eco-tourism, and increasing the accessibility of natural resources so that nearby communities can attract and retain educated professionals.

This presents a direct contrast to more idealistic preservationist approaches to conservation. Such approaches often fail to recruit support because they do not address financial concerns that generate ambivalence about conservation efforts. Creating riparian (streamside) buffers along major river systems can most effectively be accomplished through conservation easements, purchase of lands, and zoning that directs development out of floodplains. But attempts to institute these practices in impoverished rural communities are often resisted. Even the most sympathetic local officials are wary of losing property tax revenues. Farmers struggling to eke out a living often try to maximize meager profits by cultivating to the very edge a stream bank. Many do so with regret because they recognize that this increases erosion, flooding, and deposit of fertilizers and other nutrients into the stream.

This strategic plan addresses these concerns by emphasizing development of inexpensive natural recreational infrastructure that promotes tourism and other sources of revenue. This plan also advocates generous financial incentives that compensate farmers and landowners for any loss that might result from willing sale or self-imposed restrictions on the use of property along the Genesee River and Pine Creek. Its emphasis on riparian buffers and zoning that directs construction away from the floodplains also promises natural flood control that reduces the devastating impact that flooding can have on federal, state, local, and family budgets. This plan targets economic needs to win support for conservation.

Cost/Benefit Efficiency

Estimates of the costs of completing this conservation and recreational system appear in the provisional **budget** (*section below*). This lists only expenses. But the benefits are undeniable. Flood damage alone can quickly dwarf the costs of any investment in prevention. Residents of the watersheds of the Genesee River and Susquehanna River can cite floods in 1972 from Hurricane Agnes, which left the nation with 122 dead and the inflation-adjusted equivalent of $10 billion in damage (NOAA 2007).

Quantifying benefits would require more elaborate study of bicycling, kayaking, wildlife watching, and other activities promoted by this plan. For example, bicycle tourism in NY generates at least $300 million per year in retail sales and another $700 million per year in indirect benefits to the environment, transportation network, and health of NY residents (NYSOPRHP 2010 [SCORP], pp. 161-62). In 2006, over $3.2 billion was spent in NY on fishing, hunting, and wildlife watching (US Dept. of Interior, Fish and Wildlife Service 2008). In the same year, over $4.3 billion was spent in PA on these activities (US Dept. of Interior, Fish and Wildlife Service 2008). In both states, a sizeable proportion of this revenue came from non-residents. Studies have also demonstrated the value of specific trail and recreational systems, such as the Pine Creek Trail (Knoch and Tomes 2006; Tomes and Knoch 2009).

Investment in infrastructure that makes outdoor activities more accessible is thus guaranteed to generate significant returns. A number of factors indicate that the benefit achieved per person in this particular plan is far superior to many other programs of much more limited scale.

First, the program is cost-efficient because it connects large natural recreation areas that are already fully developed and that already have proven success in their respective states. These include Letchworth State Park in NY, Pine Creek Gorge in PA, the park systems of Rochester and Williamsport, and other nearby parks and recreational systems. Existing multi-use trails (rail-trails) that will be connected by this program include the Genesee Riverway Trail in Rochester (NY), the Genesee Valley Greenway (NY), Park Road in Letchworth State Park (NY), the WAG Trail (trail on Wellsville-Addison-Galeton Railroad bed from Wellsville, NY, to NY/PA state line), the Pine Creek Trail (PA), and the Lycoming County Trail and Bikeway (PA). The most developed of these recreational systems are already popular for bicycle and horseback riding, hiking, skiing, camping, canoeing, fishing, and other minimally-invasive recreation.

Second, the program is also cost-effective because it seamlessly integrates diverse but complementary goals (conservation, recreation, and economic development). The plan's emphasis on riparian buffers that perform environmental, recreational, and economic functions is the primary example of this multi-purpose approach. The multi-functionality of various features in this plan also creates opportunities for capitalizing on projects only tangential to the plan. For example, landscaping that is required by the construction or repair of a bridge provides an opportunity for inexpensive construction of a boat launch or small streamside nature park. Similarly, restrooms and parks constructed for roadside rest-stops can do double-duty if they are strategically located to accommodate users of bicycle trails and waterways.

Third, the program provides a much greater return on investment because of its emphasis on the headwaters region of the river systems that it addresses. Riparian buffer lands in the rural headwaters region cost far less per acre than waterfront property in the more populated areas downstream. Yet investment in the protection of the headwaters benefits more people. Protecting rivers at their sources benefits not only the rural communities in the headwaters region, but also the populated areas far downstream to which these rivers flow.

Fourth, the cost-efficiency of this program is enhanced by its use of natural, relatively inexpensive, and low-maintenance methods for achieving its goals. Creating riparian buffers with minimally-invasive forms of recreational infrastructure is among the least expensive ways of generating immediate construction jobs, attracting long-term tourism, reducing flood damage, improving water quality, protecting wildlife, and achieving the other goals of this program.

Fifth, the long-term benefits outweigh initial costs and require relatively modest investment to sustain. For example, forested riparian buffers created by purchasing inexpensive rural lands along the Genesee River reduce the need for more expensive artificial flood control and reduce flood damage when inevitable floods occur. They also reduce the costs of maintaining dams, rock embankments, and other short-term flood-control mechanisms. The initial costs of building campsites, trails, and other natural forms of recreational infrastructure are far less than those required to construct sports stadiums and similar recreational infrastructure. They are also far less expensive to maintain.

Sixth, the program also includes cost-effective investment in education. It will stimulate the interest of children and youth in biology, geology, water resource management, and other natural and applied sciences by expanding access to wildlife, awe-inspiring scenery, and other features of the natural world. In this plan, recreational infrastructure provides the research equipment for the laboratory of the outdoors. Few indoor laboratories can provide as much educational benefit for as little cost per student.

Seventh, the program has other benefits for which the budgetary implications may be more difficult to evaluate. For example, the relief from economic distress that it offers will provide policy makers more time to sort out appropriate approaches to new techniques for natural gas drilling already occurring in the Marcellus Shale. These promise jobs, royalties for land use, and reduced national dependence on foreign energy sources. They also risk stressing limited water resources and provide occasions for costly human error (Soeder and Kappel 2009; see more below). This could have a

negative impact on the Allegheny River, the Genesee River, and the Pine Creek/Susquehanna River systems. Constructing riparian buffers that include sustainable recreational infrastructure along the upper Genesee River and Pine Creek adds a layer of environmental and economic protection against such hazards and their unforeseen costs.

Rural Poverty and the Risk of Disproportionate Implementation

State conservation and park agencies in both Pennsylvania and New York formally acknowledge that poverty and environmental degradation are often so intertwined that they must be addressed together. For many years the PA DCNR has strategically developed state parks and other economically productive recreational resources near declining coal mining towns and struggling rural communities. One of the most dramatic examples is the PA Wilds Initiative launched in 2003 (Pennsylvania Wilds Team 2010; Econsult 2010). The *2009 New York State Open Space Conservation Plan* also explicitly integrates "environmental justice" into its discussion of the conservation needs of the Genesee River corridor (NYSDEC and NYSOPRHP 2009, p. 108).

In spite of these policies, one danger in this program for conservation and recreational development is that it might perpetuate the environmental neglect and economic disparities that it seeks to address. Cities on the scale of Rochester, Harrisburg, and Baltimore can successfully wield an arsenal of professional staff and powerful political clout in pursuing federal funds and state grants. They also have large pools of wealthy donors, trained volunteers, and aggressive advocacy groups. This contrasts with impoverished rural communities far upstream from these cities in Allegany County, NY, Potter County, PA, and Tioga County, PA. Human resources are so limited in these areas that trained specialists often have to be shared across impractical distances. Allegany County, for example, consistently ranks at the *very bottom* (62 out of 62) in per capita income among all counties in NY (Bureau of Economic Analysis 2010 [ranking, 2008]). Potter County and Tioga County respectively rank only 52nd and 66th in per capita income among the 67 counties in PA (Bureau of Economic Analysis 2010 [ranking, 2008]). Other indices of economic vitality present a similar picture.

This rural poverty hinders the use of the best practices for managing environmental resources. It also has a more direct impact on urban communities downstream than many of the leaders in these communities recognize. It is the rural communities upstream that nurture the sources of the river systems upon which urban areas downstream depend for clean water, healthy beaches, edible fish, safety from flooding, and waterfront aesthetics. Representatives of populated areas will be best served by this strategic plan if they resist the temptation to look only to their own backyard. Partnerships that they foster with struggling rural communities upstream will have mutual benefits. Water does, after all, flow downstream.

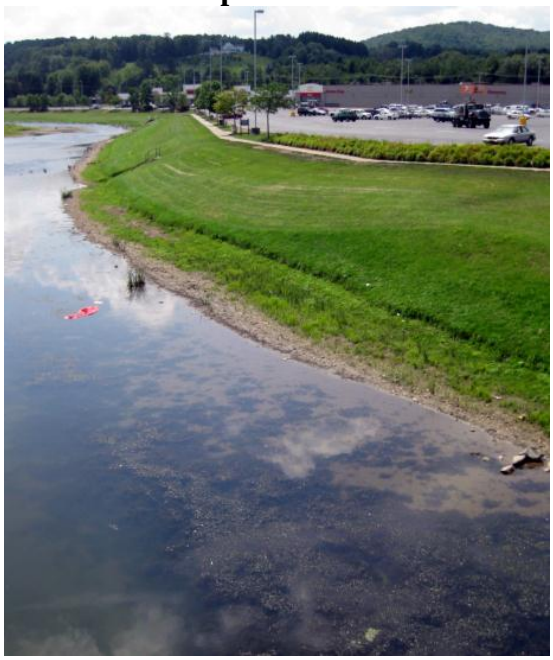
Areas along the upper Genesee River and Pine Creek arguably merit even higher priority than urban areas downstream. More is required to offset previous decades of neglect in these upstream areas, especially along the upper Genesee River. Investment in these areas also offers the most cost-effective way for achieving long-term results. For example, the entire 70 miles of the Genesee River from the river's sources in Potter County, PA, to the southern boundary of Letchworth State Park in NY could be protected with significant riparian buffers at the same price as the purchase of just a few large office buildings and the adjacent acres of land in downtown Rochester. The benefits of protecting the upper river also reach much farther per dollar. They extend all the way downstream across western NY to Rochester itself. Investments in the health of the Pine Creek watershed have similar implications. Everyone in Harrisburg, Baltimore, and communities around Chesapeake Bay lives downstream.

Genuine progress has been made in protecting both Pine Creek and the Genesee River. For example, two Finger Lakes in the Genesee River watershed (Canadice and Hemlock) were recently acquired by NYSDEC, which assures their permanent protection as drinking water resources. But this

good news does not obscure other challenges (e.g., photos below). Riverside oil refineries, toxic waste facilities, sewage leakage, acid mine drainage, and even nuclear dumps have already polluted or threatened the headwaters of the Allegheny, Genesee, and Susquehanna Rivers. In rare cases, local residents have been able to marshal heroic responses to perceived environmental crises (as in the epic narrative of Peterson 2001). But a more effective strategy is to provide additional layers of protection that safeguard these rivers in advance of any crisis. These include recreational infrastructure that attracts influential outside stakeholders who can add leverage to local efforts to protect the region's natural resources. Powerful people protect the places they play.

An Example of Why the Upstream Matters Downstream:
Algae Clogs Genesee River Next to Parking Lot Over 100 Miles upstream from Rochester

Much of the upper Genesee River and its tributaries does not have sufficient forested buffers to minimize deposit of agricultural nutrients and runoff from parking lots and other construction in the floodplain. This promotes floods, erosion, and algae growth (photos 8/2010, Wellsville, NY). High water from storms dislodges millions of *tons* of such algae and sends it downstream to Lake Ontario. There it rots and feeds other algae and bacteria already in the lake and at shoreline. This contributes to closings of Rochester beaches. The city pays with higher county water treatment costs, beach maintenance, tourism loss, and emigration of young professionals. Downstream cities like Rochester can help themselves if they invest in the headwaters region.



On Genesee River, see NYSOPRHP 2010b (maps figs. 1, 4); Slack et al. 2010; Genesee/ Finger Lakes Regional Planning Council et al. 2007; Genesee/ Finger Lakes Regional Planning Council 2004; Domske, Peet, et al. 2002; Moran and Roebig 2000. On Pine Creek, see Knoch and Tomes 2006; Lycoming County Planning Commission et al. 2006; Pine Creek Watershed Council 2005; and http://www.pinecreekwatershedrcp.org. On Susquehanna River, see http://www.susquehannarivertrail.org and http://www.srbc.net. On Chesapeake Bay watershed, see http://www.chesapeakebay.net. On trail connecting Genesee River and Pine Creek, see Genesee River Wilds Project, http://www.geneseeriverwilds.org; and North Central Penn. Regional Planning and Devel. Commission, Greenways Plan, http://www.ncentralgreenways.com (Potter County, p. 3-179 and map trails No. 1 and 7).

5. Specific Goals

(1) Economic Development: Jobs in nature park and trail construction, tourism, hospitality, environmental science education, and other fields. This benefits large populations of Rochester and Williamsport. Also benefits impoverished rural counties in between, which include areas ranking among highest in unemployment and lowest in per capita income in NY and PA.

(2) Water Resource Conservation: Protection for two river systems that hold national significance because of their relationships to one of the Great Lakes (Genesee River) and Chesapeake Bay (Pine Creek, largest tributary of West Branch of Susquehanna River). Inclusion of a unique triple-divide headwaters area offers increased attention to need for protecting a third major river system (Allegheny River, which flows into Ohio River and thence to Mississippi River).

(3) Improved Fishery and Wildlife Habitat: Forested riparian buffers enhance unique ecological corridor along wilderness river systems, which offer habitat for native brook trout, bald eagles, river otters, and other species that live in and along the Genesee River and Pine Creek.

(4) Natural Flood Control: Establishing forested riparian buffers, low-impact nature parks and trail systems, and policies that direct unsustainable development away from the floodplain offer inexpensive ways to assure economic productivity of floodplains while reducing erosion, flooding, and damage to property and infrastructure when inevitable floods do occur.

(5) Infrastructure for Bicycles, Horseback Riding, Canoes, Kayaks, and Other Sustainable Transportation: Creates major trail systems on land and water that attract tourism and other business, reduce highway traffic, have other benefits.

(6) Recreation, Health, and Other Enhancements of Quality of Life: Natural forms of recreation improve the quality of life in local communities and make them more attractive for young professionals and others from outside the area who can offer skills desperately needed in these communities.

(7) Education and Internships in Geology, Environmental Science, History, and Other Fields: Trail system increases access to geological riches of Letchworth State Park, rare wildlife species along upper Genesee River and Pine Creek Gorge, and cultural heritage such as Native American sites, the Erie Canal, Genesee Valley Canal, and remnants of the 19th-century logging industry.

(8) Raised Profile that Increases Stakeholders for Conservation, Recreation, and Business: Sheer size of the unified recreational system will help increase numbers of persons outside the region interested in protecting the natural resources of the area, improving recreational infrastructure for tourism and other business, and in other ways promoting sustainable development in the area.

(9) Cost/Benefit Efficiency: Forested riparian buffers that improve water quality, furnish health benefits, provide natural flood control, and promote the other goals described above offer a maximum of benefits to the greatest number of people at among the lowest possible costs per person served. This includes both the initial costs and long-term maintenance associated with natural flood control, natural forms of recreational infrastructure, and other minimally invasive infrastructure development.

6. Existing Attractions to be Connected by This System

(1) Rochester: Third largest city in NY, riverside parks and boating, three major waterfalls, beaches on Lake Ontario, museums and other urban attractions, aggressive bicycling community, and prestigious educational institutions such as Rochester Institute of Technology and University of Rochester.

(2) Williamsport: Major hub city in PA, parks and recreation facilities on Susquehanna River, educational institutions such as Pennsylvania College of Technology and Lycoming College, with proximity to Penn State University and others.

(3) Letchworth State Park, the "Grand Canyon of the East": Three majestic waterfalls, deep gorge, Mt. Morris Dam, infrastructure for recreation on land and water, over 700,000 visitors per year.

(4) Pine Creek Gorge, the "Grand Canyon of Pennsylvania": One of PA's most treasured trout streams, one of the top-ranked rail-trail systems in the USA, established water trail infrastructure for multi-day trips by canoe and kayak (with rafting in high water season), proven economic benefits for nearby communities.

(5) Trail Systems: Genesee Riverway Trail (Rochester, NY), Genesee Valley Greenway (NY), Park Road in Letchworth State Park (NY), WAG Trail (trail on Wellsville-Addison-Galeton Railroad bed, from Wellsville, NY, to NY/PA state line, acquired by NYSDEC 11/2009), Pine Creek Trail (PA), Lycoming County Trail and Bikeway (PA). Land-based trail connections include Finger Lakes Trail (section of Great North Trail), Mid-State Trail, and others. Connected waterways include Lake Ontario, Erie Canal, and Susquehanna River Trail.

(6) Wilderness Areas for Fishing, Hunting, Wildlife Observation, and Other Outdoor Recreation: Abundant deer, wild turkey, great blue herons, native brook trout, smallmouth bass, and relatively rare species such as bald eagles, river otters, bobcats, and others.

(7) Lake Ontario: Beaches, fishing, boats, shipping lane, and many other attractions, including transport across the lake to Canada.

(8) Erie Canal: A historic route across New York State connected to Genesee River in Rochester (host of 2010 World Canals Conference). Still used as water trail and has parallel trails for bicycling.

(9) Susquehanna River: Major fishery. Includes Susquehanna River Trail, a water trail that ultimately will stretch across as many as 22 counties in PA and NY, with camping areas and other features.

(**10) Links to other major recreation areas nearby:** In close proximity are Allegany State Park, NY; Allegheny National Forest, PA; Denton Hill State Park, Lyman Run State Park, Leonard Harrison State Park, and other state parks in Potter County, Tioga County, Clinton County, Lycoming County, and nearby areas in PA; Finger Lakes in NY; and over 55,000 acres of state forests and wildlife management areas in Allegany County, NY. Not much farther are attractions such as Niagara Falls, NY; restored elk population with viewing areas in northwestern PA; and many others.

7. Kids, Outdoor Recreation, and Education:
The Future of the Sciences and Natural Resource Conservation

Education in the natural sciences uses laboratories that offer direct experience with nature. The outdoors itself often functions as the laboratory. But even the laboratory of the outdoors requires equipment. For children and youth, much of this laboratory equipment can take the simple and relatively inexpensive form of recreational infrastructure that provides access to wilderness areas. "Laboratory equipment" thus includes bicycle trails, campgrounds, wildlife viewing platforms, nature parks, and boat launches. These are educational tools. They help future generations develop an interest in the natural sciences and natural resource conservation.

Philadelphia Zoo: The Closest Many Kids Get to Farm Animals and Wildlife

The need to invest in such educational infrastructure is more urgent than ever. Fewer children and youth experience sustained contact with nature than ever before. Urbanization, shifts in subsistence modes, and new technologies take youth out of farms and forests. Television, electronic social networks, and computer games keep youth inside for longer hours. Poverty prevents urban minority children from vacationing in distant wilderness areas. With fewer outdoor experiences, many children do not develop the kind of fascination with the natural world needed to pursue study in the natural sciences. They also do not develop an appreciation for the value of protecting natural resources.

Girl Skipping Stones, Genesee River, Belfast, NY

Photo courtesy Sherry Grugel, Allegany County Tourism

This does not bode well for the future. These same youth are growing up to become national leaders who formulate policies that directly impact natural resources. Our national security and the survival of our species may be at stake in our present choices about how much or how little to invest in recreational infrastructure that connects kids to nature.

Kids Rafting on Pine Creek: Unforgettable Lessons in the Natural Sciences

Photo courtesy Curt Weinhold Photography and Jon Dillon, Pine Creek Outfitters

8. Suggested Implementation Policies for New Funding Initiatives

(1) Reevaluate existing federal, state, and other channels for dealing with water resources in the triple divide headwaters region. One of the greatest needs is to address fragmentation in planning and resource allocation. Institutional and geographical boundaries between agencies, states, regions, counties, and even administrative districts within the same agency hinder the implementation of comprehensive watershed management programs, especially on the scale of the Genesee River.

(2) Emphasize holistic approaches to watersheds. Improving the water quality of Chesapeake Bay and Lake Ontario requires investment in the headwaters streams and all areas downstream, not just highly visible streams in populated areas. Nutrient reduction in the Bay and Lake requires more investment in riparian buffers upstream.

(3) Prioritize investment in the headwaters region over downstream areas because of greater cost-efficiency and long-term benefits. The rural nature of the headwaters region allows its water systems to be restored and protected at far less cost per acre. Investment in the headwaters also benefits the entire system, not just the immediate area. Downstream expenses, such as the huge costs of dredging the Rochester harbor, can be mitigated by riparian buffers that reduce erosion upstream.

(4) Prioritize zoning policies, riparian buffers, and other long-term solutions over responses to immediate problems and crisis management. Investment in rock rip-rap, concrete levees, and similar flood control projects distracts from long-term solutions involving wiser use of floodplains.

(5) Assure equitable investment in neglected headwaters areas based on inherent value, not the presence or absence of local champions. River conservation is undermined by disparate investments in areas that profit from greater local initiative, funds for matching grants, skilled staff, and political clout. Neglecting rural headwaters areas is counter-productive for downstream urban areas themselves.

(6) Require public access as a precondition for funding. Water resources and their recreational value should be accessible to all, not just the few wealthy individuals and powerful companies that can afford attractive waterfront properties and expensive corporate water bills.

(7) Provide financial incentives that include funding for purchase of land and easements. This is needed to win support for zoning and riparian buffer development from landowners, farmers who depend on cultivating alongside streams, and community leaders concerned about losses in revenues.

(8) Provide financial incentives that include funding for minimally-invasive recreational infrastructure (e.g., trails, nature parks, camping areas, canoe-kayak launches). For example, this could be identified as a proportion (such as 5-10%) of any funds dedicated to purchasing lands or easements for riparian buffers and instituting zoning policies. This assures that protected lands will make communities more attractive and generate revenue from tourism.

(9) Buyout instead of Rock and Concrete: Any new initiative should discourage spending a million dollars of taxpayer money on rock and concrete flood control projects to save a building worth a fraction of this cost. Such practices often just defer the problem or cause greater flooding downstream. Purchase of threatened structures in or near the floodplain is often a better long-term solution, especially if the structures are sources of runoff or pollution (e.g., township road salt barns or old and defective sewage treatment plants). This could require two conditions: (a) purchased land is permanently protected from further construction; (b) replacement structures are significantly outside the floodplain.

9. Implications for Groups Applying for Grants

The trail system provides leverage for grant applications by showing that the most people will be served with the least amount of money. For example, a grant application might emphasize:

(1) Multi-state benefits (two states and other states affected by rivers that originate in triple-divide headwaters region) and positive impact on other agencies and organizations outside one's own.

(2) Large number of jobs in trail construction, environmental science education, tourism, hospitality, and related fields that would be created by the sheer size of this recreational system.

(3) Three major national water resources protected by the riparian buffer system and possible land acquisitions nearby (Genesee River's connection to Lake Ontario; Pine Creek's connection to West Branch of Susquehanna River and thereby Chesapeake Bay; and connection of both via triple-divide area to Allegheny River and thereby Ohio River and Mississippi River). This benefits urban areas downstream (Annapolis, Baltimore, Harrisburg, Pittsburgh, Rochester, Wheeling, etc.).

(4) Education of youth who are losing contact with nature; e.g., address internships in businesses related to the outdoors, physical education that reduces childhood obesity, tourism infrastructure with an educational component, and need to educate future community leaders in natural sciences and environmental resource conservation.

(5) Efficient ratio of cost/benefits of water quality improvement methods advocated in this plan; e.g., riparian buffers reduce water purification costs by allowing gradual restoration of riverside wetlands and oxbow lakes, where cattails and other aquatic weeds provide natural filtration systems that extract arsenic and other toxins before the water seeps into aquifers and streams nearby.

(6) Flood control and reduction in flood damages by relatively inexpensive means of forested riverside riparian buffers (e.g., buffers and better zoning would have reduced flooding during devastating 1972 flood; riparian buffers allow room for increased water volumes during flood events to be dispersed safely by lateral expansion into floodplains).

(7) Protecting wildlife and fisheries that generate tourism and other industry; e.g., forested riparian buffers provide shade that helps streams maintain the higher oxygen levels and cooler temperatures necessary for trout; also provide habitat for river otters, bald eagles, and other species.

(8) Reduced costs of transportation infrastructure with sustainable features and health benefits, such as bicycling, hiking, canoe/kayak travel, and other minimally invasive modes. Bicycles reduce traffic and associated costs of road maintenance, pollution with its health impact, and other costs.

(9) Financial benefits of quality of life issues, such as health and other implications of bicycling, and recreation's enhancement of local communities. Long-term financial benefit includes stanching the destabilizing outflow of educated young professionals.

(10) Inexpensive costs per scale of natural recreation infrastructure vss. sports stadiums, amusement parks, and other entertainment venues. E.g., significant riparian buffers with recreational features could be created along 50 miles of Genesee River for same price as one pro football stadium.

10. Rough Conceptual Budget
From North (Rochester) to South (Williamsport)

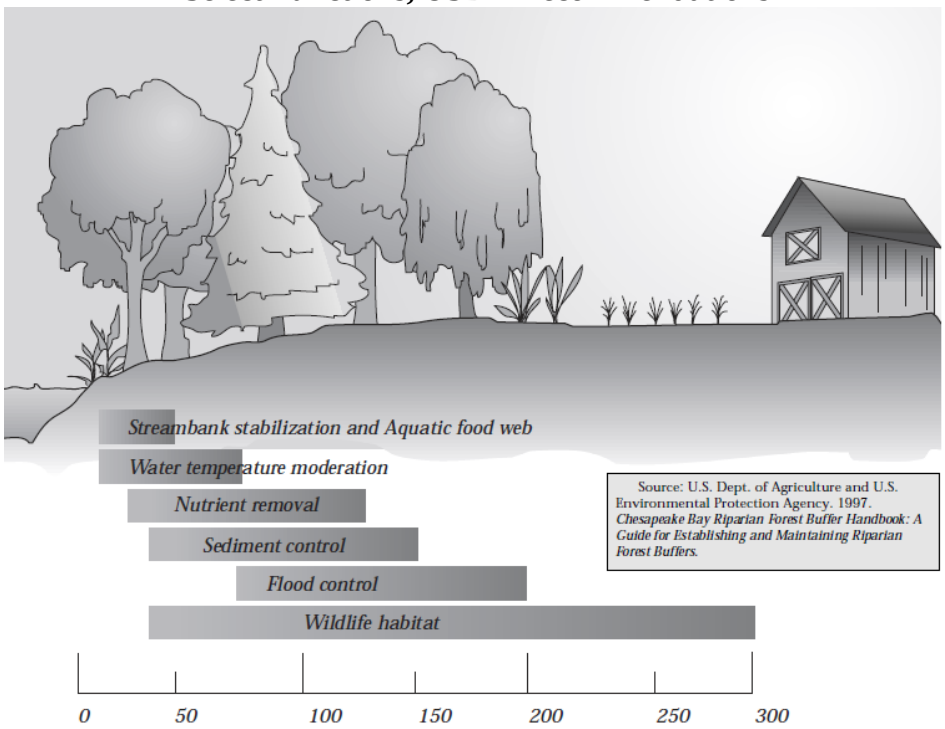
Limitations: This budget is only designed to give a rough conceptual snapshot of the general needs of the system as a whole. The methodology for creating the estimates in this budget was not consistent, so their reliability varies. Some are based on formal estimates obtained from conversations with qualified organizational representatives or from official planning documents (e.g., PA DCNR with Larson Design 2010). Such formal estimates usually could not be obtained. Most estimates below are based on calculations from general costs of materials, on-the-ground surveys, real-estate marketing and property tax information about prices of land (which vary widely), and other considerations (e.g., Rails-to-Trails Conservancy 2007). The figures are even more tentative because disbursement may range widely over 0-15 years (and easily much longer), depending on which feature is at issue. So only minor and very rough adjustments were made for inflation. To even call the following table "conceptual" therefore may be an exaggeration. More reliable figures based on more rigorous methodology must be left to planners working on specific sections.

Section of Trail and Waterway System	**Riparian Buffers, Genesee River and Pine Creek**	**Streamside Nature Parks and Water Trail Infrastructure**	**Multi-Use Trail and Related Infrastructure**
Rochester Area, from Lake Ontario south (upstream) along Genesee River to I-90	$10-15 million	$10-15 million	$10-15 million
Genesee Valley Greenway and Genesee River, from I-90 south to Mt. Morris, NY	$15-20 million	$3-5 million	$3-5 million
Letchworth State Park, NY, improvements and maintenance	NA (included in center column)	$5-10 million	NA (included in center column)
Genesee Valley Greenway, from Mt. Morris south to Portageville, NY	$3 million (sections of Keshequa Creek)	$2 million (parks and shelters, Keshequa Creek, Sonyea SF)	$8-10 million
Genesee Valley Greenway and Genesee River Wilds Project, from Portageville south to Belfast, NY	$12-15 million	$3-5 million	$8-10 million
Needed Linking Trail and Genesee River, from Belfast south to Wellsville, NY	$10-12 million	$4-6 million (includes county park)	$10-15 million
WAG Trail (Wellsville, NY, to NY/PA state line)	$4-6 million	$2-5 million	$2-3 million
Needed Linking Trail, NY/PA state line to Ansonia, PA (Potter County and Tioga County)	$10-15 million	$3-5 million	$15-20 million
Pine Creek Trail, Improvements and Extension to Wellsboro	$2-4 million	$3-5 million	$7-8 million
Needed Linking Trail, Southern End of Pine Creek Trail to Susquehanna River and Lycoming County Trail and Bikeway (Jersey Shore, PA, to Williamsport, PA)	$2-4 million (includes areas near Susquehanna River)	$2-4 million (includes areas near Susquehanna River)	$7-10 million
TOTALS	$68-94 million	$37-62 million	$70-96 million
			GRAND TOTAL $175-252 million
= Approx. $1 million per mile for river conservation and recreational system stretching ca. 230 miles across two states, the entire length of two watersheds, and triple divide headwaters region of national significance.			

11. Special Comment: Riparian Buffers

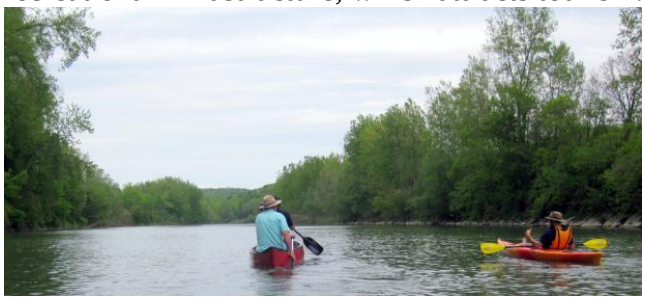
The signature strategy of this plan is expanding riparian (streamside) buffers with minimally-invasive recreational infrastructure along the Genesee River and Pine Creek. This is an economically productive alternative to more short-sighted development in the floodplains. The goal for these buffers is at least 300 feet wide on each bank (at least 100 feet for tributaries) where towns, farms, and other development allow. Federal and state agencies recommend this as a *minimum* for the broadest range of functions. They also agree that this is often inadequate. Consequently this plan seeks to extend buffers to 1/4 mile when possible. This is the average (with range up to 1/2 mile) required for the highest category of rivers in the National Wild and Scenic Rivers Act. The Genesee River and Pine Creek have protected sections, but not in this category. Yet each already has places where buffers extend 1/4 mile. This also can be achieved in other sections. In other cases even 300 feet may not be a realistic goal. These may require accommodations, such as the USDA system of "three-zones" (in sequence from riverbank: undisturbed forest, managed forest, grassland). See National Wild and Scenic Rivers (2010); NYSDEC and NYSOPRHP 2009, p. 17; NYSOPRHP 2010, pp. 82, 131; Palone and Todd 1998.

Minimum Size (in feet) of Riparian Buffers for Select Functions, USDA Recommendations



From Tjaden and Weber 1997, courtesy Robert Tjaden, Glenda Weber, and Maryland Cooperative Extension

Section of upper Genesee River, NY, with forested riparian buffers: The buffers provide (1) flood and erosion control; (2) wetlands with plants that extract toxins from water; (3) reduction in nutrients and other pollution (4) habitat for wildlife and shade to cool water to sustain gamefish, which attract tourism; (5) space for sustainable recreational infrastructure, which attracts tourism.



Pine Creek Gorge, PA

The buffers in this photo are the ideal. This cannot be replicated in all sections of the Genesee River and Pine Creek. But more safeguards are possible.

Photo courtesy Gary Tyson and Tiadaghton Audubon Society

Expensive Short-term Flood Control Projects on Genesee River
(Far More Expensive and Impermanent than Rigorous Zoning and Wide Riparian Buffers)

Photo above from Public Affairs, US Army Corps of Engineers, Buffalo Region

Mt. Morris Dam (south of Rochester) at flood stage, 1990s (left); Rock embankment, along river further upstream south of Letchworth (below)

Section without riparian buffers, upper Genesee River, NY: Causes (1) deposit of agricultural nutrients that threaten fishing and swimming in river and Lake Ontario by feeding algae bloom and fecal coliform bacteria at shoreline; (2) sedimentation of river, which increases dredging costs at Mt. Morris Dam and Rochester harbor; (3) costly damage from flooding and erosion; (4) higher water temperature, which reduces gamefish habitat and thereby tourism. The highly erosive nature of soils along the Genesee makes wide buffers even more necessary. Financial incentives can win support for zoning and landowner cooperation for riparian buffers.

Costs of Failing to Be More Pro-active in Creating Riparian Buffers along Genesee River

Photo courtesy Dick Neal Photography and Wellsville Daily Reporter

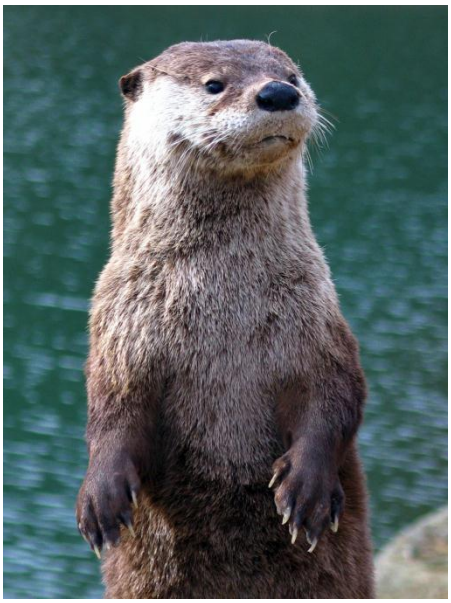
Hillside forest growth has improved water quality and reduced flooding in some parts of the Genesee River watershed. But this only masks the dangers of failing to implement more significant changes in floodplain policies. Little has changed since the devastating flood of 1972, when the hospital (left) in Wellsville, NY, collapsed into the river. Private, public, and even state-funded building in the floodplain continues. This assures more flooding and future costly flood damage.

Sinclair Oil Refinery EPA Superfund Site: BP Using Cattails in Restored Riparian Buffer Wetlands as Natural Water Purification System

Cattails and other plants in swamps, oxbows, and other wetlands in a river valley break down toxins in water so that it is naturally purified before it reaches the river. Much of this natural filtration system along the Genesee River is gone. Many riparian wetlands have been turned into fields, parking lots, and building sites. Winter salt piles are often located next to the river and its tributaries. Worse are cases such as the Sinclair Oil Refinery and industrial waste dump in Wellsville, NY. Benzene and other chemicals poisoned the Genesee River, which is the village water source. This required building a new water intake upstream. The site was acquired by BP when it took over ARCO. Federal and state tax dollars have helped BP create a water purification system with restored wetlands, cattails, and solar-cell pumps (top). BP is also replacing toxic sediment in the river bottom (right). This costly process could have been avoided if zoning and other policies had protected riparian wetlands from construction in the floodplains. But the value of an ounce of prevention for taxpayer budgets and water protection is still not appreciated. Despite many empty and cheaper tracts outside the floodplains, industrial development and building continues in the floodplains of the Genesee River and its tributaries.

Wildlife Dependent on Riparian Buffer Habitat and Clean Water in Genesee River and Pine Creek

River Otters, Bald Eagles, and other rare species along the upper Genesee River and Pine Creek require riparian habitat. They also depend on clean water to avoid poisoning by mercury, benzene, and other chemicals because they accumulate toxins from consuming fish contaminated by polluted water.



River Otter, photo courtesy US Dept. of the Interior

Bald Eagle, photo courtesy Public Affairs, US Army Corps of Engineers, Kansas City District

Riverside Park Campground by Genesee River

Photo courtesy Catherine Faulkner, Riverside Park Campground, Wellsville, NY

Caught by Guide from Rochester with Clients Fishing in Genesee River near Wellsville

The river's coldwater trout fishery would grow and become even more economically productive if more riparian buffers were added to cool more of the river.

Photo courtesy Jay Peck, JayPeckGuides.com

Boardwalk and Bird-watching Blind for Tourism, The Muck/Marsh Creek, Pine Creek Watershed

Photo courtesy Gary Tyson and Tiadaghton Audubon Society

Riparian Buffers as Resource for Eco-Tourism and Other Sustainable Business

Exploiting natural resources often generates money by destroying the environment. But money also can be made from natural resources by protecting the environment. Minimally-invasive recreational infrastructure costs much less than the infrastructure needed to attract heavy industries. Natural resources protected for recreation are also more permanent than mineral extraction and industry booms. Forests, cleaner water, and expanded fish and wildlife habitat created by riparian buffers offer rich resources for sustainable recreational infrastructure. Examples include trails, boat launches, campgrounds, fishing access points, and structures for viewing and photographing wildlife. These can become a magnet for tourism. Unlike businesses that merely shuffle around local money or send it to outside shareholders, tourism brings money into an area from outside.

Recreational activity in riparian buffers along Pine Creek (top); resulting business at Pine Creek Outfitters (bottom)

Top photo courtesy Mark Beatty, PineCreekValley.com;
Bottom photo courtesy Jon Dillon, Pine Creek Outfitters, and Mark Beatty, PineCreekValley.com

12. Special Comment:
Kayaking, Water Protection's Unique Opportunity

Kayaking is one of the fastest growing forms of outdoor recreation. The number of participants is still far below those of camping and other outdoor activities. But out of 34 types of outdoor recreation in PA and surrounding states listed in a dataset, the growth for kayaking from 1995-2005 was a whopping 169% (PA DCNR and Fermata 2005; Appendix 1 of PA DCNR and Fermata 2006, p. 5). This far exceeded the pace of growth in all other categories. This increases the stakeholders interested in the conservation of the Genesee River and Pine Creek (e.g., blueway/water trail plans for Genesee River in Slack et al. 2010; NYSOPRHP 2010b, Fig. 4). The intersection of kayaking and conservation includes:

Kayaking on Genesee River, Letchworth State Park

Photo courtesy Donald Nelson of Norse Paddle Company and Adventure Calls Outfitters

Campground for Users of Blueway (Kayaking, Canoeing) and Greenway (Bicycling, Hiking), in Forested Riparian Buffer, Pine Creek Gorge

(1) Canoe/kayak launches: These can be developed into nature parks that promote conservation by expanding nearby riparian buffers. See the National Park Service design manual, *Logical Lasting Launches* (Wolf et al. 2004).

(2) Camping areas along the Genesee River and Pine Creek: These aid multi-day trips by kayak, canoe, or trails on land. Forested camping areas of adequate size and distance from roads to assure the safety of campers and reduce vandalism can function as riparian buffers.

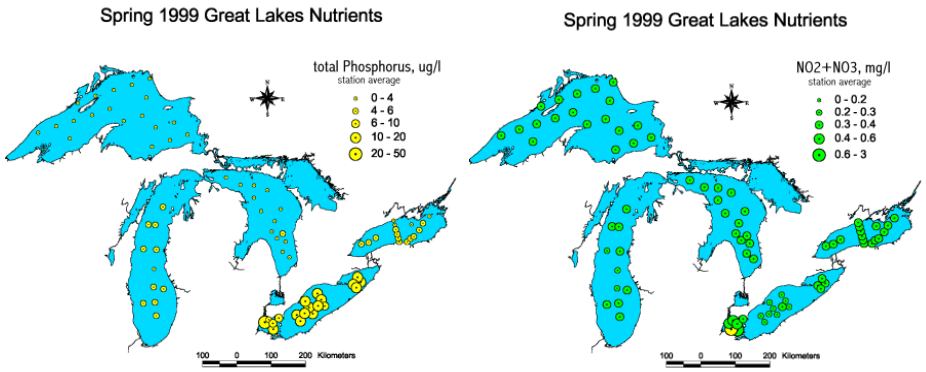
(3) Need for healthy water quality: Kayakers and canoeists have a special interest in clean water, especially in whitewater seasons when dunkings are likely. This gives them an interest in riparian buffers and nearby wetlands that include cattails and other aquatic weeds that naturally purify the water.

(4) Safety concerns: Flooding and erosion cause trees to fall into streams. This poses dangers for kayakers and canoeists. The solution is more trees, not less. Forested riparian buffers stabilize streambanks and reduce flooding.

(**5) Interest in stable stream flow**: Building in floodplains creates rapid runoff instead of replenishing wetlands and aquifers that feed streams. Better water management and expanded riparian buffers help restore and preserve water levels needed for kayaking and canoeing.

13. Additional Maps and Illustrations From North (Rochester) to South (Williamsport)

Nutrients in the Great Lakes (phosphoros, nitrates, nitrites)



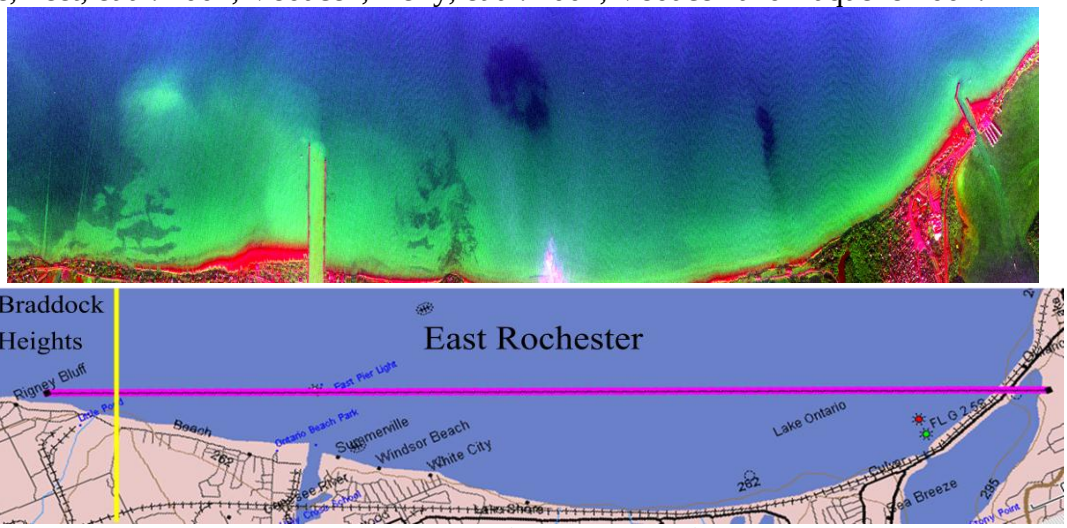
Great Lakes images from US EPA, Great Lakes Liminology, at http://www.epa.gov/glnpo/monitoring/indicators/limnology/SprPtot.html. Chart data on Genesee River from Moran, Roebig, et al. 2000, p. 40

Causes of Impairment, Genesee River and Its Tributaries

Agriculture	29%
Hydrologic Modification	24%
Streambank Erosion	19%
Urban Runoff	8%
Land Disposal	6%
Construction	4%
Septic	3%
Municipal	2%
Other	5%

Algae Beds in Lake Ontario at Mouth of Genesee River (Rochester Embayment, EPA Great Lakes "Area of Concern")

Hard rock substrate that provides habitat for cladophora algae appears as mottled dark green patches to the left and right of the Genesee River mouth piers in this hyperspectral image of the Rochester Embayment. The image was shot from a plane overflight on October 10, 2002. The large dark area in the upper center and the thin dark area in the center of the right half of the image are cloud shadow. The greenish areas along the shore are where the sand bottom is visible and the greenish area a little above and to the left of the piers is sediment from the Genesee River. During the summer the algae dies, washes up on beaches, rots, and promotes growth of coliform bacteria. Resulting health hazards routinely require beach closings. The algae growth is nurtured by phosphoros and other nutrients deposited in Lake Ontario from agriculture, storm water, wastewater treatment plants, and sewage systems. West and east of the photo are lake intakes for Monroe County Water Treatment Authority. See Domske, Peet, et al. 2002; Vodacek, Kelly, et al. 2002; Vodacek and Raqueno 2002.



Images and content details courtesy Anthony Vodacek and RIT Center for Imaging Science, from Vodacek and Raqueno 2002, image #4-01; CD # C67 (slide 18); content above and images from Vodacek, Kelly, et al. 2002 and Vodacek and Raqueno 2002 (downloaded 7-4-2010)

Upper Falls, Rochester

The Genesee River cascades over three falls in Rochester before entering Lake Ontario. (Not to be confused with the three falls in Letchworth State Park). Public access to much of this beauty is obscured by previous generations of neglect, industrial development, and privileged access to riverfront property by the wealthy. The EPA and current city administrators are nobly trying to rectify the errors of their predecessors by investing in the health, beauty, and accessibility of the riverfront. But the costs of this restoration could have been avoided if the city's founders had followed practices already known in their day, such as zoning and creating riparian buffers that direct development away from the river. Most of the Genesee River still does not have such protections. New problems for Rochester are being created in neglected areas far upstream while the city spends money to clean up old ones. Like New York, Boston, and other cities, Rochester would benefit from investing in protection of its river's headwaters.

Photo courtesy Roc Wiki and Rick Urwin, http://rocwiki.org/Genesee_River?action=Files&do=view&target=Genesee_River.jpg (Creative Commons Attribution, Non-Commercial Share-Alike 3.0)

Downtown Rochester and Genesee River

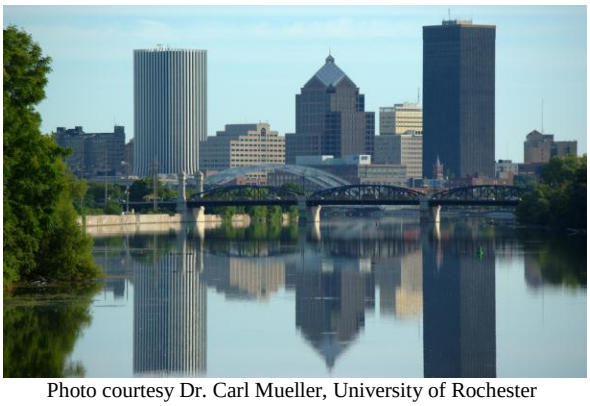
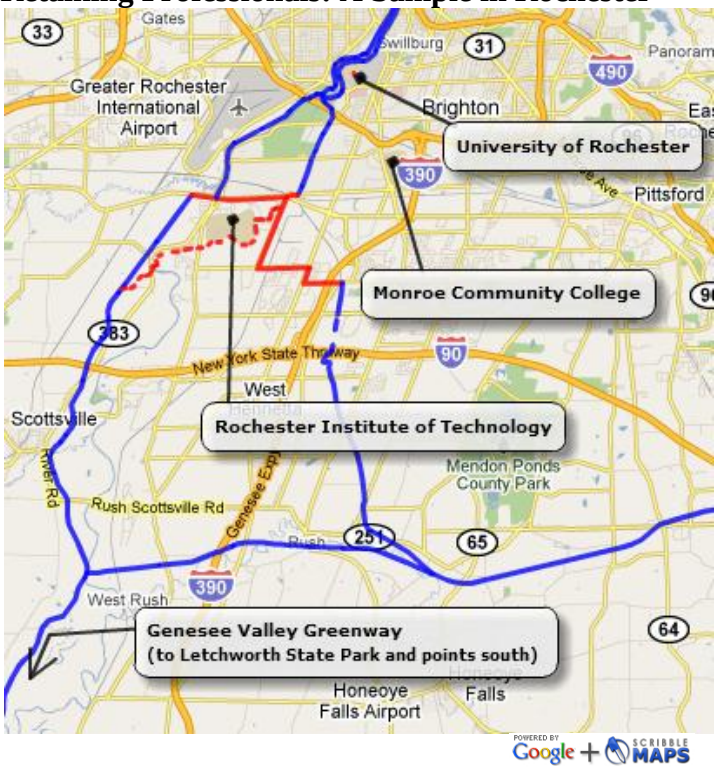


Photo courtesy Dr. Carl Mueller, University of Rochester

Rochester's Dynamic Bicycling Community: 2008 Rochester Omnium Bicycle Race (Predecessor to 2010 Tour de New York)

Photo by Al Fink, courtesy Al Fink and Scott Page, Full Moon Vista Bike and Sport

Bicycling Trails as Resources for Education and Retaining Professionals: A Sample in Rochester



Data from Genesee Transportation Council, Genesee Valley Greenway, and Dr. Jonathan Schull, Rochester Institute of Technology

Bicyclist reading interpretive sign on Genesee Valley Greenway, a rail-trail along former Genesee Valley Canal. Canal locks, ponds created for the canal, and a route sometimes used by the Underground Railroad appear on the Genesee Valley Greenway. Signs like this one and larger kiosks capitalize on the educational value of such features. This is especially valuable for keeping youth in touch with nature and history**.** Photo by Fran Gotcsik, courtesy of Fran Gotcsik and Joan Schumaker, Friends of the Genesee Valley Greenway

Snowshoeing and Horseback Riding on Genesee Valley Greenway

Both photos by Fran Gotcsik, courtesy of Fran Gotcsik and Joan Schumaker, Friends of the Genesee Valley Greenway

Camping along Genesee Valley Greenway?

Hotels are frequent along the Greenway. But most of it (outside of Letchworth State Park and Sonyea State Forest) is a narrow corridor without usage rights safely away from the trail for tent camping or shelters like the one below on the Appalachian Trail. Creating riparian buffers along the Genesee River and tributaries such as Black Creek (Belfast area) that can be expanded up from the floodplains would provide spaces for camping. For shelter styles on Appalachian Trail, click icons on Appalachian Trail Conservancy map at: www.appalachiantrail.org/site/c.mqLTIYOwGlF/b.4850633/k.9733/Interactive_Map.htm.

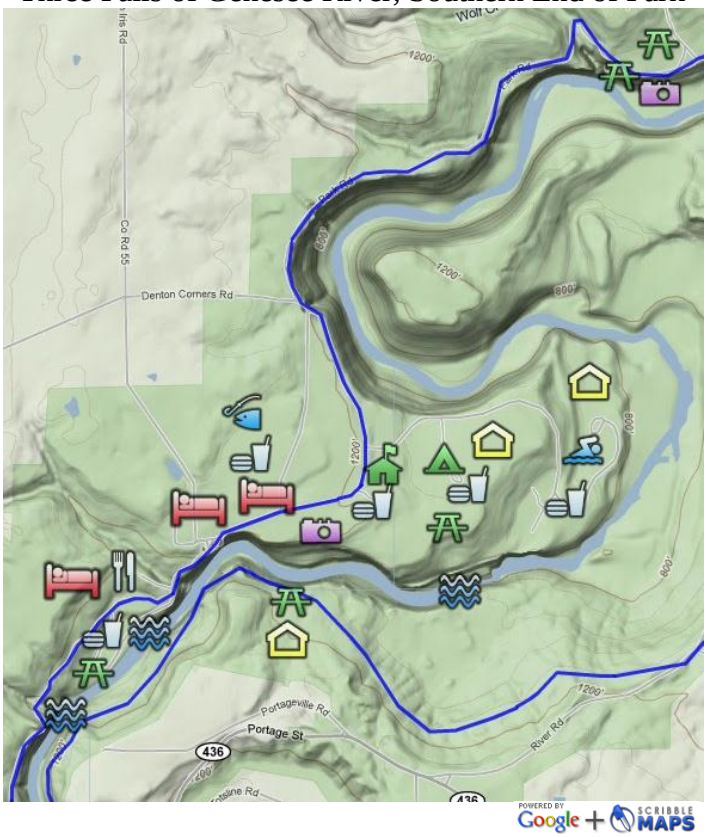
Glen Brook Shelter on Appalachian Trail in MA, photo by John Fletcher, courtesy Appalachian Trail Conservancy

Genesee Valley Greenway (middle section) and Park Road in Letchworth State Park

Data from NYSORHP and Friends of Genesee Valley Greenway

Letchworth State Park, NY

Three Falls of Genesee River, Southern End of Park



Rafting on Genesee River in Letchworth

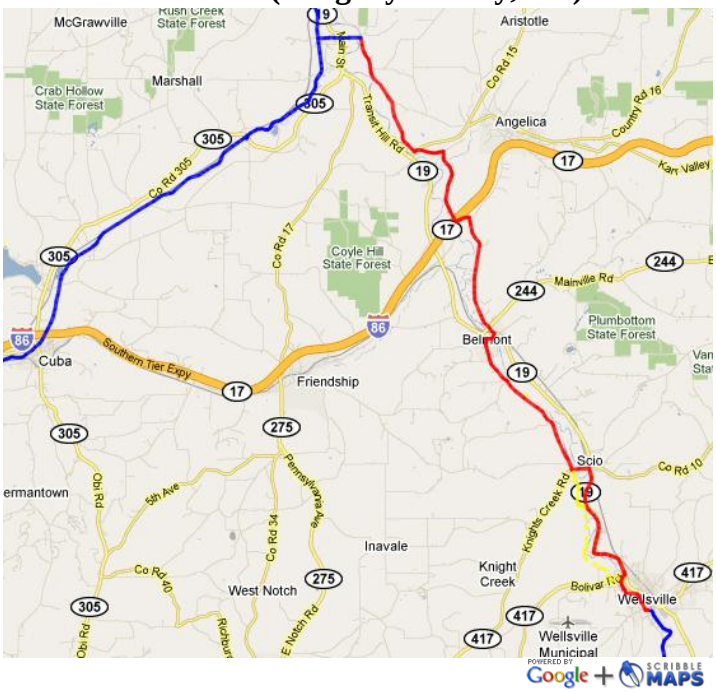
Balloon Rides in Letchworth Canyon

Map data above from NYSOPRHP
Photo of rafting, courtesy of Donald Nelson of Norse Paddle Company and Adventure Calls Outfitters
Photo of balloons, courtesy of Keith Sproul, Sky Chariot Balloons

Middle Falls of Genesee River in Letchworth State Park,
view from Genesee Valley Greenway

Photo courtesy Joan Schumaker, Friends of the Genesee Valley Greenway

Temporary Route of Linking Trail from Genesee Valley Greenway in Belfast to WAG Trail in Wellsville (Allegany County, NY)



Map data from Allegany County, Village of Wellsville, Genesee Valley Greenway, and Genesee River Wilds Project

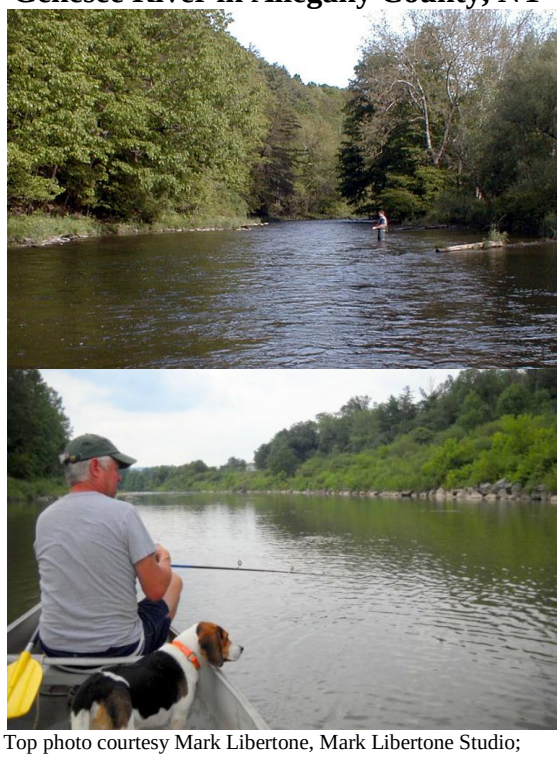
Blue: Genesee Valley Greenway (Belfast to Cuba) and WAG Trail (Wellsville and south).

Red: Needed linking trail, provisionally routed mostly onto low-traffic roads.

Priority Trail Sections in Allegany County, NY

(1) Genesee River water trail (signs, canoe/kayak launches, riverside nature parks, etc.). **(2)** Genesee Valley Greenway (surface improvement, signs, parking lots, campsites, etc.). **(3)** WAG Trail (trail on bed of Wellsville-Addison-Galeton Railroad from Wellsville to NY/PA state line; surface improvement, signs, etc.). **(4)** Signs on low-traffic roads used as provisional linking trail between Genesee Valley Greenway in Belfast and WAG Trail in Wellsville: Linking trail crosses bridge to east side of Genesee River in Belfast; proceeds south on road along east side of river until Belmont; crosses bridge to west side of river in Belmont; proceeds south on road along west side of river until Scio; crosses bridge to east side of river in Scio; proceeds south on Route 19 to Wellsville; crosses bridge to west side of river to meet WAG Trail. **(5)** Long-term, potential trail on west side of Genesee River between Wellsville and Scio (only major section in county needed to keep trail safely off NY Route 19), pending negotiations with landowners. **(6)** Long-term, move road sections into newly acquired forested riparian buffers as they grow.

Fishing for Trout Near Wellsville and Smallmouth Bass Near Caneadea, Genesee River in Allegany County, NY



Top photo courtesy Mark Libertone, Mark Libertone Studio; bottom courtesy Sherry Grugel, Allegany County Tourism

First Lessons in Environmental Science, Genesee River in Belfast, NY

Photo courtesy Sherry Grugel, Allegany County Tourism

Genesee River Near Triple Divide

The Genesee River is just a small seeping indentation in this photo of a pasture near one of its sources outside of Ulysses, PA. This is not far from the triple continental divide that separates the watersheds of the Allegheny River, Genesee River, and Pine Creek/Susquehanna River system.

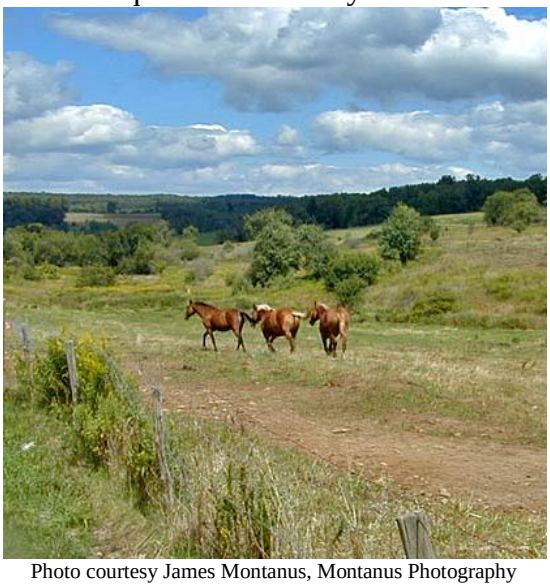


Photo courtesy James Montanus, Montanus Photography

Planned and Existing Trails, Northeastern Potter County, PA

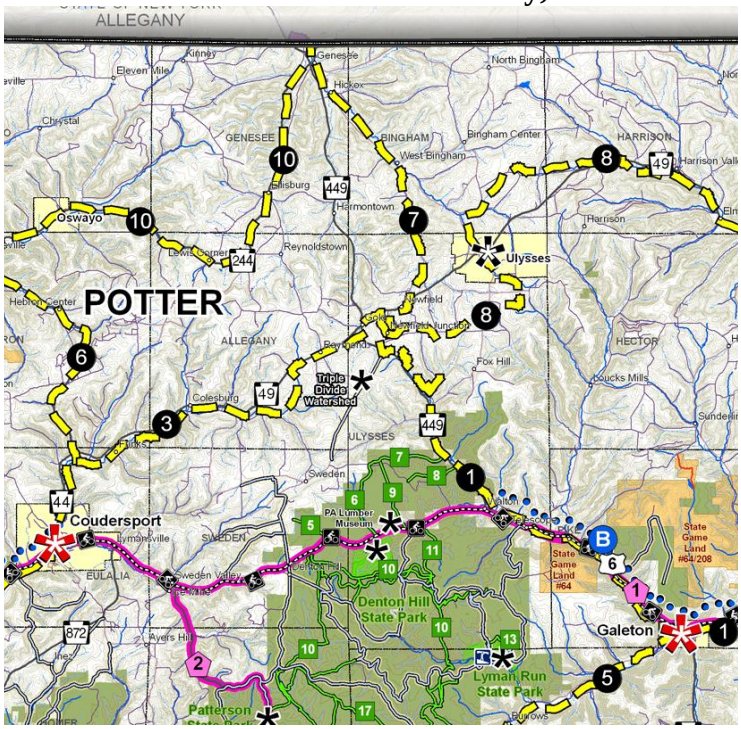


Image from North Central PA Regional Planning and Development Commission Greenways Plan, courtesy John Buerkle and Michael Kotyk, Pashek Associates; Matt Marusiak, North Central PA Regional Planning and Development Commission; with data from Charlotte Dietrich, Potter County Planning Commission

Route of trail needed to connect WAG Trail along Genesee River in NY to Pine Creek Trail in PA (Potter County, PA, and Tioga County, PA). Follows planned trails on old railroad beds**.** Parallels Trails No. 7 and No. 1 on planning commission map above. Trail follows PA section of WAG Trail from NY/PA State Line southward to source of Genesee River near Gold, PA. Trail then crosses triple divide and connects to source of Pine Creek. Trail follows Pine Creek southeast to Galeton, PA, and then continues eastward along Pine Creek from Galeton to Ansonia, PA. Provisional trail can be routed on low-volume roads from NY/PA line south to PA Route 6 until trail's off-road sections are finished.

Blue: WAG Trail, NY, and Pine Creek Trail, PA; **Red:** Planned trails.
Data from Potter County Planning Commission and Tioga County Planning Commission

Trout Caught Near Triple Divide in Lyman Run State Park, Pine Creek Watershed

Pine Creek Trail in Pine Creek Gorge, PA

Map data from PA DCNR and Tioga County Visitors Bureau.

Bicycling and Skiing on Pine Creek Trail

Both photos above courtesy Curt Weinhold Photography

Restrooms, Darling Run Parking Area, Pine Creek

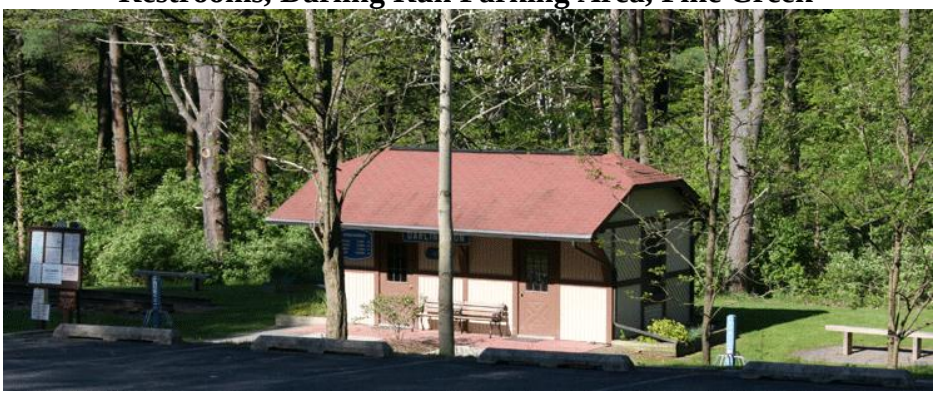


Photo courtesy Mark Beatty, Pine Creek Valley.com

Restrooms, Parking Lots, and Campgrounds along Pine Creek Serve both Land and Water Trails. These kinds of recreational infrastructure maximize investments by serving multiple activities, such as bicycling, hiking, kayaking, horseback riding, fishing, and swimming

Outdoor Education on Pine Creek
Guide for Pine Creek Outfitters pointing out eagles on Pine Creek. Quiet watercraft provide an effective way to see bald eagles, elusive river otters, and other wildlife along the Genesee River and Pine Creek.

Photo courtesy Curt Weinhold Photography, with thanks to Jon Dillon, Pine Creek Outfitters; Chuck Dillon in photo

Tourism on Pine Creek Trail

Mountain Trail Horse Center, photo courtesy Curt Weinhold Photography

Recruiting the Next Generation for Wildlife and Water Resource Protection

Photo courtesy Jon Dillon, Pine Creek Outfitters

Planned Linking Trail, Mouth of Pine Creek to the Susquehanna River in Williamsport

Planned route of needed trail needed to connect southern end of Pine Creek Trail in Jersey Shore, PA, to Lycoming County Bikeway and Trail in Williamsport, PA (Lycoming County, PA)

Map data from Mark Murawski and Gary Montgomery, Lycoming County Planning Commission (2/2010)

Causes of Impairment, Pine Creek Watershed (Percent of 23 waters in watershed)

Phosphorus (fertilizers, sewage, etc.)	41%
Siltation (erosion, runoff, etc.)	31%
Metals other than mercury (mine drainage, industry, waste, etc.)	17%
Low dissolved oxygen and organic enrichment (fertilizers, sewage, etc.)	7%
Mercury (coal-energy plants, etc.)	3%

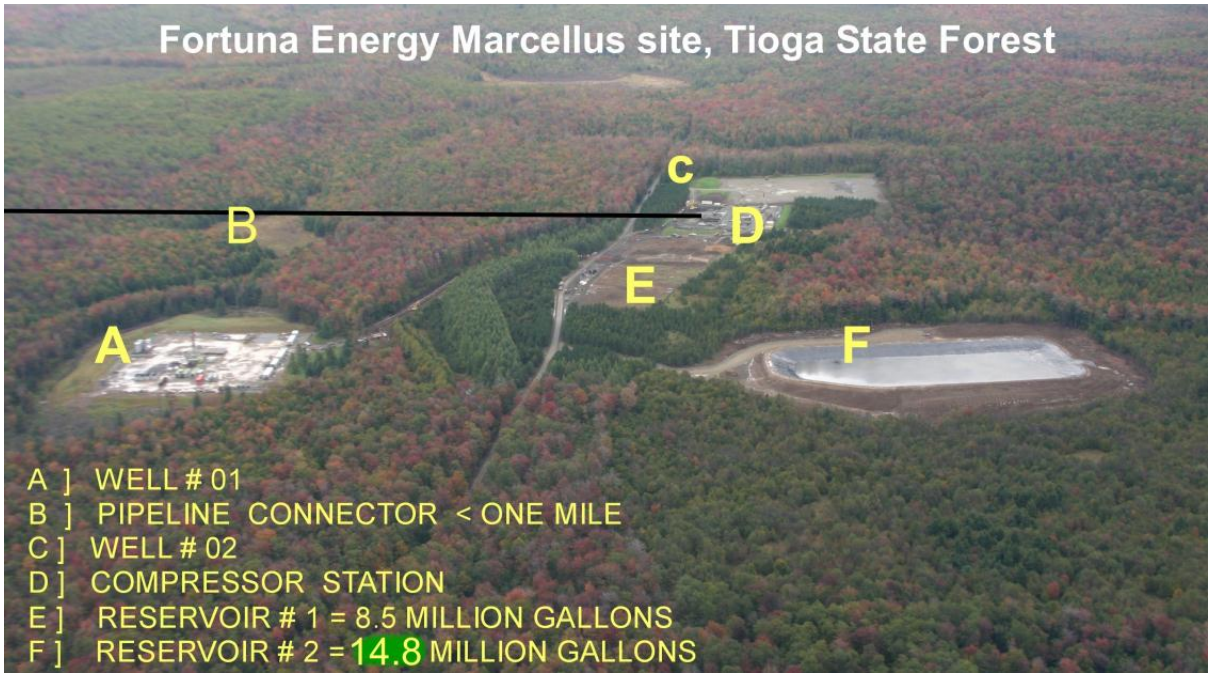
Partly from 2004 data in US EPA, Sect. 303(d) List Fact Sheet, 2004, accessed 7-25-2010, http://iaspub.epa.gov/ tmdl_waters10/ huc_rept.control?p_huc=02050205&p_huc_desc=PINE

Gas Drilling in PA State Forest North of Williamsport, Just Outside of Pine Creek Watershed, in Susquehanna River Basin

Photo April 2010; bottom, November 2009; both photos courtesy Dick Martin and PAForestCoalition www.PaForestCoalition.org

Natural Gas Boom: Opportunity and Risk in the Triple Divide Headwaters Region

Marcellus shale is under all three river systems in the triple divide headwaters region. This and other layers with natural gas present a complexity of costs and benefits. Natural gas burns cleaner than other fossil fuels. Drilling creates new jobs, reduces dependence on foreign oil, and offers royalties to owners of mineral rights. But its road damage, pipelines, and drilling pads increase erosion and flood risks. New horizontal drilling techniques require millions of gallons of water for each well, often drawn from drinking water aquifers and delicate trout streams. Deadly chemicals used in the process poison the water, so it is pumped into reservoirs for reuse or purification. Purification usually requires trucking to distant treatment facilities that often do not remove all additives. Numerous opportunities for human error make accidents inevitable. Well blowouts, spills, and long-term poisoning of water sources have already occurred. Strict regulation can reduce such dangers. But funding sufficent staff for regulatory agencies requires tax dollars. All wells eventually will decline in productivity. Many may be sold to small companies that cannot afford restoration. Some will be abandoned, shifting cleanup costs to taxpayers. Risks to water resources underground are also still not fully understood. Weighing costs and benefits is not easy. Expanding riparian buffer policies is the least that can be done. See Soeder and Kappell 2009; Myers, Dickson, Khalequzzaman, et al. 2009; Milici and Swezey 2006.

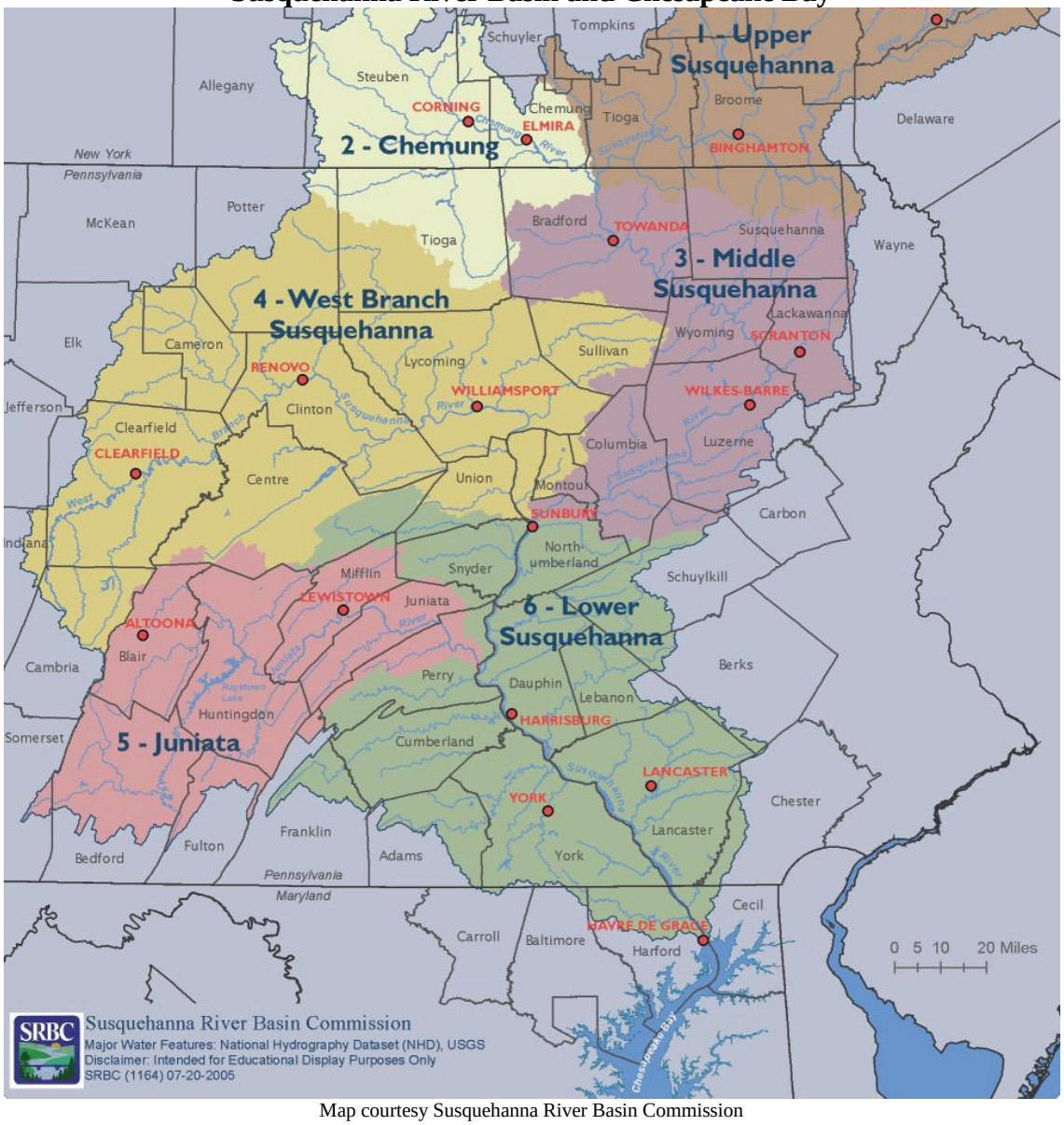


Hiawatha Cruise, Susquehanna River, Williamsport (Downriver from mouth of Pine Creek)

Photo courtesy Mark Nance and Williamsport *Sun-Gazette*

Susquehanna River in Williamsport

Susquehanna River Basin and Chesapeake Bay



Map courtesy Susquehanna River Basin Commission

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NYSDEC = New York State Department of Environmental Conservation (above).

NYSOPRHP = New York State Office of Parks, Recreation and Historic Preservation (above).

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Susquehanna River Trail, http://www.susquehannarivertrail.org.

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Triple Divide Trail System
Strategic Plan

Appendix
Initial Contacts for Collaboration

Prepared

for the

Genesee River Wilds Project

www.geneseeriverwilds.org
Belmont, NY
March 2011
(updated from September 2010)

by

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Photo on Previous Page:
One of the Ski Slopes at Denton Hill State Park,
Near the Triple Divide in Potter County, PA
Courtesy Jodi Carts, Ski Denton

Appendix*

Initial Contacts for Collaboration
From North (Rochester) to South (Williamsport)

Federal, State, and Regional Agencies and Organizations in New York State

Army Corps of Engineers, Mount Morris Dam

Army Corps of Engineers: Public Affairs, US Army Corps of Engineers, Buffalo District, 1776 Niagara Street, Buffalo, NY 14207, Ph. (716) 879-4410, Email: Public.Affairs@lrb01.usace.army.mil

Steve Winslow, Park Manager, Mount Morris Dam and Recreation Area, U.S. Army Corps of Engineers, 6103 Visitor Center Road, Mt Morris, NY 14510, Ph. (585) 658-4790, Email: stephen.e.winslow@usace.army.mil

EPA (US Environmental Protection Agency) Rochester Embayment

EPA Rochester Embayment: http://www.epa.gov/glnpo/aoc/rochester.html

US EPA Remedial Action Plan Liaison: Barbara Belasco, U.S. EPA Region 2, 290 Broadway, New York, NY 10007-1866, Ph. (212) 637-3848, Email: belasco.barbara@epa.gov

Local RAP Coordinator: Charles Knauf, Monroe Co. Department of Health, P.O. Box 92832, 111 Westfall Road, Room 962, Rochester, NY 14692-4680, Ph. (585) 274-8440, Email: cknauf@monroecounty.gov

State RAP Contact**:** Robert Townsend, RAP Coordinator, New York State Department of Environmental Conservation, Division of Water, Bureau of Watershed Management, 625 Broadway, Albany, NY 12233-3508, Ph. (518) 402-8284, Email: retownse@gw.dec.state.ny.us

Genesee/Finger Lakes Regional Planning Council
(Rochester Area and Northern Genesee River Basin)

G/FLRPC website: http://www.gflrpc.org Email (general information): gflrpc@gflrpc.org

Genesee/Finger Lakes Regional Planning Council, 50 West Main Street , Suite 8107, Rochester, NY 14614-1234. Contacts: Brian C. Slack, Senior Planner, Ph. (585) 454-0190 (ext. 21), Email: bslack@gflrpc.org *and* David Zorn, Senior Planner, Ph. (585) 454-0190, Email: dave.zorn@gflrpc.org

*Appearance in this appendix does not constitute endorsement of this plan. This is merely a starting point for initiating collaboration. It is not a complete list of actual partners or potential contacts.

New York State Department of Transportation (NYSDOT)

New York State Department of Transportation, Bicycle and Pedestrian Section, 50 Wolf Road, Pod 54, Albany, NY 12232, https://www.nysdot.gov/divisions/operating/opdm/local-programs-bureau/repository/bicycle/contacts/index.html. Contacts: Eric L. Ophardt, NYS Bicycle & Pedestrian Program Manager, Ph. (518) 457-0922, Email: EOPHARDT@dot.state.ny.us; James M. Ercolano, Pedestrian Specialist, (518) 457-4087, Email: JERCOLANO@dot.state.ny.us.

New York State Department of Transportation, Region 4, Genesee Valley, 1530 Jefferson Rd., Rochester NY 14623, Dan Hollowell, Bicycle Pedestrian Program Development, Ph. (585) 272-3410, Email: dhallowell@dot.state.ny.us; Kevin Bush, Regional Design Engineer (for Bridge Design and Environmental Issues), Ph. (585) 272-3360, Email: kbush@ dot.state.ny.us; Steve Beauvais, Regional Bicycle Program Coordinator, Ph. (585) 272-3466, sbeauvais@dot.state.ny.us

New York State Department of Transportation, Region 6, Central Southern Tier, 107 Broadway, Hornell NY 14843; Brian C. Kelly, Program and Planning Engineer, Ph. (607) 324-8411, Email: bkelly@ dot.state.ny.us.

New York State Department of Environmental Conservation (NYSDEC)

New York State Department of Environmental Conservation, Region 8, 6274 E. Avon-Lima Rd. Avon, NY 14414-9519, Email: region8@gw.dec.state.ny.us

New York State Department of Environmental Conservation, Region 9, New York State Department of Environmental Conservation, 270 Michigan Avenue, Buffalo, NY 14203-2915, Email: region9@gw.dec.state.ny.us

Ronald G. Abraham, New York State Department of Environmental Conservation, Region 9 Sub-Office, 5425 County Route 48, Belmont, NY 14813-9758, Ph. (585) 268-5392

Paul McKeown, Natural Resources Supervisor, New York State Department of Environmental Conservation, Region 9 Sub-office, 182 E. Union, Suite 3, Allegany, NY, 14706-1328; Ph: (716) 372-0645 pemckeow@gw.dec.state.ny.us

Scott Cornett, Fisheries Biologist, New York State Department of Environmental Conservation, Region 9 Sub-office, 182 E. Union, Suite 3, Allegany, NY, 14706-1328, Ph. (716) 372-0645, Email: sccornet@gw.dec.state.ny.us

Abby Snyder, Region 9 Headquarters, New York State Department of Environmental Conservation, 270 Michigan Avenue, Buffalo, NY 14203-2915, Ph.: 716-851-7000, Email: amsnyder@gw.dec.state.ny.us

New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP)

Christina Croll, GIS Manager, New York State Office of Parks, Recreation and Historic Preservation, Empire State Plaza, Agency Building 1, Albany, NY 12238, Email: christina.croll@oprhp.state.ny.us

Raymond Goll, Deputy General Manager, Niagara Frontier Park Region, New York State Office of Parks, Recreation and Historic Preservation, Prospect Park, P.O. Box 1132, Niagara Falls NY 14303-1132, Ph. (716) 278-1770, Email: raymond.goll@oprhp.state.ny.us

Thomas B. Lyons, Director of Resource Management, New York State Office of Parks, Recreation and Historic Preservation, Empire State Plaza, Agency Building 1, Albany, NY 12238, (518) 474-0409, Email: Thomas.Lyons@oprhp.state.ny.us

Richard Parker, Director, Genesee Regional Office, New York State Office of Parks, Recreation and Historic Preservation, 1 Letchworth State Park, Castile, NY 14427-1124, Ph. (585) 493-3600, Email: Richard.Parker@oprhp.state.ny.us

Nancy Stoner, Trails Planner, New York State Office of Parks, Recreation and Historic Preservation, Empire State Plaza, Agency Building 1, Albany, NY 12238, Ph: 518-486-2909, Email: nancy.stoner@oprhp.state.ny.us

M. Brad Whitcomb, Director, Allegany Region Office, New York State Office of Parks, Recreation and Historic Preservation, Allegany State Park, 2373 ASP Route 1, Salamanca, NY 14779, Ph. (716) 354-9101, Email: mark.whitcomb@oprhp.state.ny.us

NRCS, United States Department of Agriculture (USDA)
http://www.ny.nrcs.usda.gov/

~~Joanne Kurtis, Seneca Trail Resources Conservation and Development, 8 Martha Street P.O. Box 756, Ellicottville, NY 14731, Ph. (716) 699-2375 ext. 5, Email: joann.kurtis@ny.usda.gov~~

Seneca Trail Resources Conservation and Development, 8 Martha Street, P.O. Box 756, Ellicottville, NY 14731 Ph. (716) 699-2375 ext. 5, Email: senecatrailrcd@yahoo.com

Conservancy, Trail, and Watershed Organizations, NY

Finger Lakes-Lake Ontario Watershed Protection Alliance (FL-OWPA), 309 Lake Street, Penn Yan, New York 14527 http://www.fllowpa.org
Contact: Kristy LaManche, Program Coordinator, Water Resources Board, Finger Lakes-Lake Ontario Watershed Protection Alliance, 309 Lake Street, Penn Yan, New York 14527, Ph. (315) 536-7488 (FL-OWPA) or (315) 673-7148 (direct), Email: klamanche@twcny.rr.com

Finger Lakes Trail: Finger Lakes Trail Conference, 6111 Visitor Center Rd., Mt. Morris, NY 14510 http://www.fltconference.org/trails Ph. (585) 658-9320 Email: info@fingerlakestrail.org. For full staff list, see http://www.fltconference.org/trails/index.php/about-the-fltc/contact-us.

Genesee River Wilds Project, Crossroads Conference Center, 6087 State Route 19N, Belmont, NY 14813 http://www.geneseeriverwilds.org Contacts at this address: H. Kier Dirlam, Allegany County Planner, Ph.: (585) 268-7472 Email: dirlamhk@alleganyco.com; William Hart, President, Genesee River Wilds, Inc., and Chair, Genesee River Project Committee, Greater Allegany County Chamber of Commerce, Ph. (585) 268-5500 or (585) 610-3422; for Greater Allegany County Chamber of Commerce, Executive Director, and Director of Tourism, Allegany County, NY, see http://www.alleganychamber.org, Ph. (585) 268-5500. Other contacts: Eric Grace, Executive Director, Genesee Valley Conservancy, eric@geneseevalleyconservancy.org; coordinator of interstate relations (NY and PA): Allen Kerkeslager, Associate Professor, Saint Joseph's University, Philadelphia, Ph. (610) 660-1121, Email: akerkesl@sju.edu

Genesee Valley Conservancy, P. O. Box 73, One Main Street, Geneseo, NY, 14454, http://www.geneseevalleyconservancy.org, Ph.: (585) 243-2190, Email: info@geneseevalleyconservancy.org. Contact: Eric Grace, Executive Director, eric@geneseevalleyconservancy.org

Genesee Valley Greenway: Friends of the Genesee Valley Greenway, P.O. Box 42, Mt. Morris NY 14510; http://www.fogvg.org, Ph. (585) 658-2569, Email: fogvg@frontier.net. Contacts: See officers and leaders for given sections on organization page (from home page, go to "About Us" and "Organizations" or directly to http://www.fogvg.org/about/organization.php). Communication about current project has been kindly handled by Joan Schumaker, schumaker@frontiernet.net. Liaisons with NYSDEC, NYSDOT, and NYSOPRHP include directors of appropriate regional offices.

Great Eastern Trail, http://www.greateasterntrail.net: For New York Section: Pat Monahan, President, Finger Lakes Trail Conference, pmonahan@stny.rr.com. See above on Finger Lakes Trail.

Nature Conservancy, Central & Western Chapter Office, 1048 University Avenue, Rochester, NY 14607, Ph. (585) 546-8030, Email: gholtz@tnc.org

Nature Conservancy, New York State Office, 195 New Karner Rd, Suite 200, Albany, NY 12205 Ph. (518) 690-7850, Email: kamayo_smith@tnc.org

New York Bicycling Coalition, http://www.nybc.net. Contacts: Richard deSarra, rdscomm@rochester.rr.com; Jason Crane, jason@nybc.net

Parks and Trails New York, 29 Elk Street, Albany, NY 12207 http://www.ptny.org, Ph. 518-434-1583 Email: ptny@ptny.org

Rails-to-Trails Conservancy, Northeast Regional Office, 2133 Market Street Suite 222, Camp Hill, PA 17011 Contacts, phone, and e-mail: see current info. at http://www.railstotrails.org/ourWork/whereWeWork/northeast/contact.html For main office, see website at http://www.railstotrails.org

Trout Unlimited, New York State Council, http://www.nysctu.org. Contacts: Ron Urban, ronsgonefishing@aol.com; Diane Maciejewski, dryfly@buffnet.net; Scott Seidman, scott.seidman@rochester.edu. For Trout Unlimited, Upper Genesee Chapter, see Allegany County (below).

Rochester, NY and Environs (including Monroe County, NY)

Doug Benson, Associate Planner, Local Waterfront Revitalization Program, City of Rochester, Ph. (585) 428-6824, Email: Bensond@cityofrochester.gov

Erik Frisch, Transportation Specialist, City of Rochester, Ph. (585) 428-6709, Email: erik.frisch@cityofrochester.gov

Cyclopedia Rochester (in collaboration with the pediatric unit at University of Rochester's Strong Memorial Hospital and other organizations), http://www.cyclo-pedia.org. Contacts include: Dr. Cappy Collins, cappycollins@gmail.com; see website for others.

Genesee Regional Offroad Cyclists, G.R.O.C., P.O. BOX 25674, Rochester NY 14625, http://www.victormtbc.com, Email: info@mygroc.com

Genesee Transportation Council, http://www.gtcmpo.org, Genesee Transportation Council, 50 West Main St., Ste. 8112, Rochester, NY 14614, Ph. (585) 232-6240, gtc@gtcmpo.org

Charles L. Knauf, Environmental Health Project Analyst, Monroe County Department of Health, 111 Westfall Road, Room 976, Rochester, NY 14692 Ph. (585) 753-5440, cknauf@monroecounty.gov

Monroe County Soil and Water Conservation District: www.monroecountyswcd.org, Contact: Robert Kiley, Email: robert.kiley@ny.nacdnet.net

Richard Perrin, Executive Director, Genesee Transportation Council, 50 West Main St., Ste. 8112, Rochester, NY 14614, Ph: (585) 232-6240, Email: RPerrin@gtcmpo.org

Rochester Cycling Alliance, http://www.rochestercyclingalliance.org. Contacts include: Richard De Sarra, rdscomm@rochester.rr.com, Dr. Scott Macrae, scott_macrae@urmc.rochester.edu, Dr. Jon Schull, Jon.Schull@rit.edu, and others (see website).

Dr. Jonathan Schull, Associate Professor, Information Technology, and Interim Director, Center for Student Innovation, Rochester Institute of Technology, One Lomb Memorial Drive, Rochester, NY 14623-5603 Ph. (cell) 585-738-6696 Email: Jon.Schull@rit.edu Center website, http://innovation.rit.edu .

Southwest Rochester Riverfront Planning, John E. Curran, Chair of Steering Committee, Ph. (585) 747-2324, Email: jecurran@rochester.rr.com

Robert R. Torzynski, Program Manager, Bicycle and Pedestrian Planning, Genesee Transportation Council, 50 W. Main St., Suite 8112, Rochester, NY 14614-1227, Ph: (585) 232-6240, Email: rtorzynski@gtcmpo.org

Water Education Collaborative, c/o Monroe County ROC, 444 East Henrietta Road, Rochester, NY 14620, http://www.h2ohero.org/index.html, Contact: Paul M. Sawyko, Coordinator, Ph. (585) 753-5441, Email: psawyko@monroecounty.gov

Livingston County, NY, and Wyoming County, NY

Livingston County: Livingston County Planning Department, 6 Court Street, Room 305, Geneseo, NY, 14454-1043 Ph: (585) 243-7550; Email contacts: Heather Ferrero, hferrero@co.livingston.ny.us, *and* Angela Ellis, aellis@co.livingston.ny.us

Wyoming County: Wyoming County Soil and Water Conservation District, 31 Duncan Street Ext., Warsaw, NY 14569 Ph. (585) 786-5070, Email contact: Greg McKurth, gmckurth@email.com

Allegany County, NY

H. Kier Dirlam, Allegany County Planner, Crossroads Conference Center, 6087 State Route 19N, Belmont, NY 14813, Ph. (585) 268-7472, Email: dirlamhk@alleganyco.com

Executive Director, Greater Allegany County Chamber of Commerce, Suite 140, Crossroads Conference Center, 6087 State Route 19N, Belmont, NY, 14813; also Director of Tourism for Allegany County, NY; Ph. (585) 268-5500. For chamber info., see http://alleganychamber.org

John E. Foels, Director of Development, Allegany County Legislature, Crossroads Conference Center, 6087 State Route 19N, Belmont, NY, 14813, Ph. (585) 268-5500, Email: FoelsJE@alleganyco.com

Lee Gridley, Allegany County Planning Commission, Crossroads Conference Center, 6087 State Route 19N, Belmont, NY, 14813, Email: leeg@localnet.com

William Hart, Chair, Genesee River Project Committee, Greater Allegany County Chamber of Commerce, Suite 140, Crossroads Conference Center, 6087 State Route 19N, Belmont, NY, 14813; Ph. (585) 268-5500 or (585) 610-3422, Email: billypeavey3@hotmail.com

Fred Sinclair, Chairman, Planning and Economic Development Committee, Allegany County Legislature, County Office Building, Belmont, NY, 14813, Ph. (585) 268-9222, Email: fpsinclair@yahoo.com

Scott Torrey, Allegany County Soil and Water Conservation District, Ag Service Center, 5425 County Route 48, Belmont, NY, 14813; E-mail: scott.torrey@alleganyctyswcd.org. For District information, see http://www.agmkt.state.ny.us/soilwater/contacts/county_offices.html#Allegany

Trout Unlimited, Upper Genesee Chapter, see http://uppergenny.x10hosting.com. Contacts: Brent Kelley, kelleybd@alfredstate.edu; Mark Libertone, mklibertone@yahoo.com.

Federal, State, and Regional Agencies and Organizations in Pennsylvania

NRCS, United States Department of Agriculture (USDA)
http://www.pa.nrcs.usda.gov/

Stacy Koch, Coordinator, Endless Mountains Resource Conservation and Development Council, Natural Resources Conservation Service (USDA), Stoll Natural Resource Center, RR 5 Box 5030D, Towanda, PA 18848, Ph. (570) 265-5288 ext. 5, Email: stacy.koch@pa.usda.gov

Terry Marsh, Headwaters Program Assistant, Natural Resource Conservation Service (USDA), Headwaters Region, 478 Jeffers Street, Bldg. 3, Suite D, DuBois, PA 15801 http://www.headwaterspa.org, Ph. (814) 375-1372 ext. 4, Email: terry.marsh@pa.usda.gov

National Forest Service

Rob Fallon, District Ranger, Allegheny National Forest, State Route 66, Marienville, PA 16239, Ph. (814) 927-5799, Email: rfallon@fs.fed.us

North Central Pennsylvania Regional Planning and Development Commission
(includes Potter County)
http://www.ncentral.com

Eric Bridges, Executive Director, North Central Pennsylvania Regional Planning and Development Commission, 651 Montmorenci Road, Ridgway, PA 15853, Ph. (814) 773-3162, Email: ebridges@ncentral.com

Robert Imhof, North Central Pennsylvania Regional Planning and Development Commission, 651 Montmorenci Road, Ridgway, PA 15853, Ph. (814) 773-3162, Email: bimhof@ncentral.com

Amy Kessler, Director of Community Development and Regional Planning, North Central Pennsylvania Regional Planning and Development Commission, 651 Montmorenci Road, Ridgway, PA 15853, Ph. (814) 773-3162 ext. 3017, Email: amy@exchange.ncentral.com

Matt Marusiak, Community Development Coordinator, North Central Pennsylvania Regional Planning and Development Commission, 651 Montmorenci Road, Ridgway, PA 15853, Ph. (814) 773-3162 ext. 3042, Email: mmarusiak@exchange.ncentral.com

Donald J. Masisak, Deputy Director of Enterprise Development, North Central Pennsylvania Regional Planning and Development Commission, 651 Montmorenci Road, Ridgway, PA 15853, Ph. (814) 773-3162 ext. 3044

Northern Tier Regional Planning and Development Commission
(includes Tioga County)
http://northerntier.org

Kevin Abrams, Executive Director, Northern Tier Regional Planning and Development Commission, 312 Main Street, Towanda, PA 18848 Ph. (570) 265-1500 or (570) 265-9103 or (888) 868-8800, Email: abrams@northerntier.org

Kim Barnes, Deputy Director, Northern Tier Regional Planning and Development Commission, 312 Main Street, Towanda, PA 18848 Ph. (570) 265-1542 (570) 265-9103 or (888) 868-8800, Email: barnes@northerntier.org

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Matt Williams, Regional Planner, Northern Tier Regional Planning and Development Commission, 312 Main Street, Towanda, PA 18848 Ph. (570) 265-1537 or (570) 265-9103 or (888) 868-8800 Email: williams@northerntier.org

Pennsylvania Department of Conservation and Natural Resources (PA DCNR)

Dana Crisp, Assistant Regional Manager, PA Wilds, Bucktail State Park, State Park Region 1 Office, RR 4, Box 212, Emporium, PA 15834-9799, Ph. (814) 486-3365, Email: rcrisp@state.pa.us

Michael Eschenmann, Community Recreation, Bureau of Recreation and Conservation, Pennsylvania Department of Conservation and Natural Resources, Rachel Carson State Office Building, P. O. Box 8475, Harrisburg, PA 17105-8475, Ph. (717) 783-2360, Email: meschenman@state.pa.us

Wes Fahringer, Northcentral/Williamsport Regional Office, Bureau of Recreation and Conservation, Pennsylvania Department of Conservation and Natural Resources, Pennsylvania Department of Conservation and Natural Resources, Ph. (570) 326-3521, Email: mfahringer@state.pa.us

Chip Harrison, Manager, Lyman Run State Park, 454 Lyman Run Road, Galeton, PA 16922, Ph. (814) 435-5010, Email: lymanrunsp@state.pa.us; also manager of Leonard Harrison State Park, Leonard Harrison State Park, 4797 Route 660, Wellsboro, PA 16901-8970, Ph. (570) 724-3061, Email: leonardharrisonsp@state.pa.us

Meredith Hill, Executive Director, Pennsylvania Wilds Office, Pennsylvania Department of Conservation and Natural Resources, Rachel Carson State Office Building, P. O. Box 8767, Harrisburg, PA, 17105-8767; Ph. (717) 705-8533 or (717) 772-9087, Email: mehill@state.pa.us

Diane Kripas, Chief, Greenways and Rivers Partnership Division, Bureau of Recreation and Conservation, Pennsylvania Department of Conservation and Natural Resources, Rachel Carson State Office Building, P. O. Box 8475, Harrisburg, PA 17105-8475 Ph. (717) 772-1282 Email: dkripas@state.pa.us

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Roy Siefert, Tioga State Forest District, Wellsboro, PA 16901, Email: rsiefert@state.pa.us

Vanyla Tierney, Greenways, Trails and Rivers, Bureau of Recreation and Conservation, Pennsylvania Department of Conservation and Natural Resources, Rachel Carson State Office Building, P. O. Box 8475, Harrisburg, PA 17105-8475, Ph. (717) 783-2654, Email: vtierney@state.pa.us

Pennsylvania Department of Transportation (PennDOT)

David Bachman, Pedalcycle and Pedestrian Advisory Committee, Bureau of Highway Safety and Traffic Engineering, P.O. Box 2047, Harrisburg 17105-2047, Ph. (717) 783-8444, Email: dbachman@state.pa.us

Pennsylvania Wilds Planning Team

Matt Quesenberry, Chair, Pennsylvania Wilds Planning Team, and Director, Elk County Planning Department, Elk County Courthouse Annex, 300 Center Street, PO Box 448, Ridgway, PA 15853, Ph. (814) 776-5335, Email: planning@countyofelkpa.com

Conservancy, Trail, and Watershed Organizations, PA

Curt Ashenfelter, Executive Director, Keystone Trails Association, 101 N. Front St., Harrisburg, PA 17101, Ph. (717) 238-7017, Email: ktahike@verizon.net

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Michele DePhilip, Director of Freshwater Conservation, Nature Conservancy, Pennsylvania Chapter, 2101 North Front Street, Building #1, Suite 200, Harrisburg, PA 17110, Ph.: (717) 232-6001, mdephilip@tnc.org

Great Eastern Trail, http://www.greateasterntrail.net. Contacts: Chair, Great Eastern Trail board, Tom Johnson, johnts25@gmail.com; Webmaster, Great Eastern Trail, John Spies, jspieslp@gmail.com. For PA contacts, see Keystone Trails and Mid-State Trail.

Keystone Trails Association, 101 N. Front St., Harrisburg, PA 17101, Ph. (717) 238-7017 http://www.kta-hike.org

Mid-State Trail, http://hike-mst.org. Contacts: President, Ed Lawrence, cathyed@nationi.net; Secretary, Scott Adams secretary@hike-mst.org; Treasurer, Kirk Bucynski, bucynski@verizon.net; Mapping, gis@hike-mst.org; Webmaster, Steve Tuckerman, webmaster@hike-mst.org**;** Regions, Joe Healey, jnlhealey@aol.com, Peter Fleszar, tioga@hike-mst.org

Nature Conservancy, Pennsylvania Chapter, 2101 North Front Street, Building #1, Suite 200, Harrisburg, PA 17110, Ph.: (717) 232-6001 or (866) 298-1267, Email: pa_chapter@tnc.org

North Central Pennsylvania Conservancy, http://www.npcweb.org. Reneé Carey, Executive Director, North Central Pennsylvania Conservancy, P.O. Box 2083, Williamsport, PA 17703, Ph. (570) 323-6222, Email: rcarey@npcweb.org. General contact: office@npcweb.org.

Pennsylvania Equine Council, http://www.pennsylvaniaequinecouncil.com Contact: Bud and Gwen Wills, Summerville, PA Phone: (814) 379-3759 gwwills@pennswoods.net

Pennsylvania Land Trust Association, 105 Locust Street 300, Harrisburg, PA 17101 http://conserveland.org. Ph. (717) 230-8560, Email: info@conserveland.org

Pennsylvania Trout Unlimited, http://www.patrout.org. Contacts: Dave Rothrock, daver2@comcast.net; Rick Carlson, jrandrc@gmail.com; Brian Wagner, fish4brian@aol.com; George Kutskel, maksak@comcast.net; Ken Undercoffer, kcoffer@atlanticbb.net.

Peter Fleszar, Mid-State Trail (Tioga Region) *and* Keystone Trails Association, 1075 Greenhill Dr, Hummelstown, PA 17036, Ph. 717 583-2093 or (717) 576-3112, Email: peter.fleszar@verizon.net *or* tioga@hike-mst.org

Pine Creek Watershed Council at http://www.pinecreekwatershedrcp.org

Rails-to-Trails Conservancy, Northeast Regional Office, 2133 Market Street Suite 222, Camp Hill, PA 17011. Contacts, phone, and e-mail: see current info. at http://www.railstotrails.org/ourWork/whereWeWork/northeast/contact.html For main office, see website at http://www.railstotrails.org

Wanda Shirk, Vice President, Keystone Trails Association and Chair, Potter County Planning Commission, 1152 North Brookland Road, Genesee, PA 16923, Ph. (814) 848-7944, Email: wshirk@pennswoods.net

Western Pennsylvania Conservancy, 800 Waterfront Drive, Pittsburg, PA 15222, http://www.paconserve.org. Ph. (412) 288-2777, Email: Christopher Tracey at ctracey@paconserve.org. Other contacts: info@paconserve.org, water@paconserve.org, alleghenyproject@paconserve.org

Potter County and Tioga County, PA

Coudersport Area Chamber of Commerce, http://www.coudersport.org. Coudersport Area Chamber of Commerce, P.O. Box 261, 6 East Second Street, Coudersport, PA 16915, Ph. (814) 274-8165, Email: cacoc@coudersport.org

Charlotte Dietrich, Director, Potter County Planning Commission, County Courthouse, One East Second Street, Coudersport, PA, 16915, Ph.: 814-274-8254, Email: cdietrich@pottercountypa.net

Jack Fleckenstein, Watershed Specialist, Potter County Conservation District, 107 Market Street Coudersport, PA 16915; Ph. (814) 274-8411 ext. 4. Email: j.fleckenstein@pottercd.com

Headwaters Resource Conservation and Development Council, 478 Jeffers St., Bldg 3, Ste D., DuBois, PA 15801, http://www.headwaterspa.org. Ph. (814) 375-1372 ext. 4, Email: headwatr@penn.com

Pennsylvania Lumber Museum, 5660 US Route 6, P.O. Box 239, Galeton, PA 16922 www.lumbermuseum.org, Ph. (814) 435-2652, Email: info@lumbermuseum.org

Pine Creek Watershed Rivers Conservation Plan: Watershed Council and Plan Partners Contacts Information and and Links, http://www.pinecreekwatershedrcp.org/

Potter County Conservation District, 107 Market Street, Coudersport, PA 16915, http://www.pottercd.com, Ph. (814) 274-8411, Email: pccd@zitomedia.net

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Susquehannock Trail Club, P. O. Box 643, Coudersport, PA 16915, http://www.stc-hike.org, Email: stchike@gmail.com

Tioga County Commissioners, 118 Main Street, Wellsboro, Pa 16901, Ph. (570) 723-8209, Email: commissioners@tiogacountypa.us

Tioga County Conservation District, 50 Plaza Lane, Wellsboro, PA 16901 Ph. (570) 724-1801 District Manager, Adam Hills, ahills@tiogacountypa.us Chesapeake Bay Technician, Nathan Barnes, nbarnes@tiogacountypa.us Agriculture Conservation Technician, Andrea Boyce, aboyce@tiogacountypa.us Watershed Specialist, Erica Tomlinson, etomlinson@tiogacountypa.us

James Weaver, Director, Tioga County Planning Commission, 118 Main Street Wellsboro, Pa 16901, Ph. (570) 723-8251, Email: jaweaver@epix.net

Wellsboro Area Chamber of Commerce, http://www.wellsboropa.com/ Ph. (570) 724-1926. Contacts: Julie VanNess, Executive Director, juliev@wellsboropa.com; Holly Kerr, Administrative Assistant, hollyd@wellsboropa.com; Lauren Morral, Administrative Assistant, info@wellsboropa.com; Mary Worthington, Secretary/Treasurer, GROW, mwwacc@epix.net.

Williamsport and Lycoming County, PA

Paul Hoffmaster, Chair, Pine Creek Council of Governments, and Supervisor, McHenry Township, 145 Railroad Street, Cammal, PA 17723, Ph. (570) 753-5695 or (570) 753-2679; Email: mchentwp@kcnet.org

Lycoming County Conservation District, 542 County Farm Rd, Suite 202, Montoursville, PA 17754, Ph. (570) 433-3003; Contacts: Mark Davidson, mdavidson@lyco.org; Carey Entz, centz@lyco.org

Kevin McJunkin, Environmental Planner, Lycoming County Planning Commission, 48 West Third Street, Williamsport, PA, 17701, Email: kevin.mcjunkin@lyco.org

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Michael Walker, Nutrient Management Program Coordinator, Northeast Region, State Conservation Commission, Ph. (570) 433-2640, ext. 221, Email: miwalker@state.pa.us

Williamsport, Streets and Parks Department: William C. Wright, General Manager, Email: dirstreetsparks@cityofwilliamsport.org; John O. Markley, Jr., Assistant General Manager, spassistgm@cityofwilliamsport.org

Jerry S. Walls, AICP, Professional Planner, 1950 Eldon Road, Montoursville, PA 17754 Ph. (570) 323-2760 or (570) 419-1771, Email: jerry@jwallsaicp.com

Dr. Mel Zimmerman, Director, Clean Water Institute, Dept. of Biology, Heim Biology and Chemistry Building, Lycoming County College, Williamsport, PA 17701, Ph. (570) 321-4185, Email: zimmer@lycoming.edu

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