

NORTHWEST PENNSYLVANIA GREENWAYS

Venango County, Pennsylvania

DCNR Project No. BRC-12.5.2



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Northwest Pennsylvania Regional Planning and Development Commission

Ms. Denise McCloskey, Executive Director
Mr. Matt Gilara, Project Manager
Mr. W. Randy Rice, Director, Community Development & Planning

Venango County Commissioners

Mr. Timothy S. Brooks, Chairperson
Mr. Troy A. Wood, Vice Chairman
Ms. Janet D. Beichner, Commissioner
Ms. Denise Jones, Chief Clerk/County Administrator

Venango County Regional Planning Commission

Ms. Judith Downs, Executive Director

Venango County Greenways Subcommittee

Mr. Ben Breniman	Mr. Fred Krizinsky	Mr. Warren Thomas
Ms. Jan Beichner	Mr. Jeff Langworthy	Mr. Willis Thomas
Mr. Chris Beichner	Ms. Sally Mays	Mr. Jeff Wagner
Ms. Marilyn Black	Mr. Neil McElwee	Ms. Karen Wenner
Mr. Lance Bowes	Ms. Sarah Mellring	Ms. Erin Wiley
Mr. Ed Caton	Mr. Joe Pacchioni	Moyers
Ms. Mary Ann Caton	Mr. Neal Parker	
Ms. Debra Frawley	Mr. Marc Rickard	
Ms. Sonja Hawkins	Mr. Mike Robinson	
Mr. Jim Hepler	Mr. Steve Rombold	
Ms. Susan Hileman	Mr. Ty Ryen	
Mr. Jim Holden	Mr. Randy Seitz	
Mr. Larry Horn	Mr. Tom Sherman	
Mr. Gary Hutchison	Ms. Sue Smith	
Mr. Dan Kaylor	Mr. Wally Sterns	

Pennsylvania Department of Conservation and Natural Resources

Ms. Diane Kripas, Chief, Greenways and Conservation Partnerships
Mr. Alex MacDonald, Greenways and Conservation Partnerships
Ms. Kim McCullough, Regional Parks and Recreation Advisor

Pennsylvania Department of Transportation District 1-0

Ms. Erin Wiley Moyers, Transportation Planning Specialist

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NORTHWEST PENNSYLVANIA GREENWAYS

NORTHWEST PENNSYLVANIA - *Greenways Plan*

Venango County
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Prepared for:

Northwest Pennsylvania Regional Planning and Development Commission
395 Seneca Street
P.O. Box 1127
Oil City, PA 16301
814-677-4800

By:

Pashek Associates, Ltd.
619 East Ohio Street
Pittsburgh, PA 15212
(412) 321-6362

INTRODUCTION

The Venango County Greenways Plan is part of the larger Northwest Pennsylvania Greenways Planning effort undertaken by the Northwest Regional Planning and Development Commission. The Northwest Pennsylvania Greenways planning process was a multi-county effort completed for the Commission's eight counties, and individual plans for six counties, including:

- Erie County
- Clarion County
- Crawford County
- Forest County
- Venango County
- Warren County

Before the start of this plan, individual plans for Lawrence and Mercer Counties were completed. Their results were synthesized into the Northwest Region Greenways Plan.

The purpose of this section is to introduce the concept of Greenways to you, to present the benefits of establishing a greenway network in Venango County, and establishing the goals and objectives of creating the network. Towards that end, this Introduction is organized as follows:

- Vision for Greenways in Venango County
- Benefits of Greenways to Venango County
- Goals and Objectives of the Venango County Greenways Plan

Venango County is rich in recreation opportunities and natural resources. Many of these resources are unique and special to the Northwest Pennsylvania region and beyond. They include:

- The Oil Heritage Region: This region includes outstanding artifacts, scenic views, area museums, cultural traditions; and the communities themselves continue to depict the Oil Region's legacy as the birthplace of the petroleum industry. The initial oil boom was triggered by Edwin Drake's 1859 drilling of the world's first successful commercial oil well. Its development was fueled by inventors and entrepreneurs coping with and creating new methods for the production, movement, refining, and business management of this energy industry. Rapid shifts of wealth, population, communication systems, and transportation established the area's pattern of Victorian-era towns along the waterways and more recent communities on the highlands. Today, residents and visitors enjoy heritage attractions, warm hospitality, and four seasons of outdoor recreation in "the Valley that Changed the World."

The Oil Region was designated by the Commonwealth of Pennsylvania as an official Pennsylvania Heritage Area in 1994 and by the National Park Service as an official National Heritage Area in 2004. The state and federal designations use the same boundaries, comprising 34 municipalities in 708 square miles. Included, are the City of Titusville, Oil Creek Township and Hydetown Borough in eastern Crawford County, plus all of the County of Venango.

Heritage development activities address one or more of the following goals:

- Cultural conservation and preservation
- Recreation and open space
- Economic development and community revitalization

Venango County Greenways Plan

- Promotion
 - Education and interpretation
 - Intergovernmental cooperation and partnerships
- Oil Creek State Park: approximately 6,250 acres in northern Venango County along Oil Creek. The Oil Creek Valley is home to the site of the world's first successful commercial oil well. The park tells the story of the early petroleum industry by interpreting oil boomtowns, oil wells, and early transportation.
- Two High Quality Streams, Cherry Run and Little Sandy Creek, and two Exceptional Value Streams, Hemlock Creek and Dennison Run.
- One Important Bird Area surrounding Oil Creek State Park.
- Washington's Trail: historic and scenic driving route commemorating George Washington's first military and diplomatic journey during 1753 and 1754.
- Allegheny River: totals approximately 325 miles in length from its headwaters in central Potter County to the point in Pittsburgh where it joins with the Monongahela to form the Ohio River. One hundred and seven miles of the Allegheny River has been officially recognized as the Middle Allegheny River Water Trail, presenting a wealth of non-motorized canoeing and kayaking opportunities. Furthermore, more than 86 miles of the River has been designated as a Wild and Scenic River. Venango County includes two sections of the Wild and Scenic designated river.
- French Creek: world renowned for its biodiversity.
- North Country National Scenic Trail: a recreational trail that stretches for about 4,600 miles from North Dakota to New York. Currently the proposed route through Clarion County has not be defined and secured. Therefore, in Clarion County a temporary route connects to the Clarion Highlands Trail passing through Shippenville and utilizes the existing Sandy Creek to reach the Allegheny River Trail in Venango County. Continuing on the Allegheny River Trail the temporary route connects to connect to Parker, in Armstrong County, and then reconnects to the permanent trail corridor in Butler County.

By planning to conserve and enhance greenway corridors, Venango County is taking measures to preserve and enhance these outstanding resources, and others, for future generations of Venango County residents.

WHAT IS A GREENWAY?

The term “Greenway” was first coined in the 19th century, and since that time greenways have been defined in many ways. Some people think of greenways as primarily recreational, namely trails for hiking, jogging, biking, or canoeing/kayaking (often called water trails or “blueways”). For them, greenways are places that offer opportunities to experience the outdoors. For others, the purpose of greenways is primarily for conservation of undeveloped land containing important natural resources like forests, wetlands, and stream banks, along with the plants and animals that live there. Still others see greenways in aesthetic terms, preserving the pastoral countryside setting in rural areas, and protecting outstanding natural features such as stream valleys, forested ridges, and sensitive habitats. Each of these ideas are embraced by the following all-encompassing definition, which is adapted from the Commonwealth of Pennsylvania's Greenways Plan: ***Pennsylvania Greenways - An Action Plan for Creating Connections***, and is embraced by this Greenways Plan:

A greenway is a corridor of open space, varying greatly in scale, and incorporating or linking diverse natural, cultural, and scenic resources. Some greenways are recreational corridors or scenic byways accommodating pedestrian and non-motorized vehicle traffic on both land and water; while others function almost exclusively for environmental protection and are not designed for human passage.

The movement to establish greenways was given a significant boost in 1987 when the President’s Commission on American Outdoors recommended that an interconnected greenways network be established throughout the nation. Many states, including the Commonwealth of Pennsylvania, accepted the task of promoting greenways. *Pennsylvania’s Greenways – An Action Plan for Creating Connections* was published in 2001. This report established a strategy for creating a comprehensive, statewide greenway network by the year 2020. The Governor appointed the Department of Conservation and Natural Resources (DCNR) to oversee the Commonwealth’s greenways program. DCNR, in partnership with county and municipal officials, supports greenways planning and implementation through education, technical assistance, and grant-making programs.

Through the Northwest Pennsylvania Greenways, the following definition was developed to define greenways for the northwest region’s participating counties:

Greenways of Northwestern Pennsylvania

A greenway is a corridor of open space. Greenways vary greatly in scale, from narrow ribbons of green that run through urban, suburban, and rural areas to wider corridors that incorporate diverse natural, cultural and scenic features. They may follow old railways, canals, or ridge tops, or they may follow stream corridors, shorelines, or wetlands, and include water trails.

Some greenways are for human activity and may accommodate motorized and non-motorized recreation and transportation uses. Other greenways conserve natural infrastructure for the benefit of community, economy, and environment and are not designed for human passage.

WHY A GREENWAYS PLAN FOR VENANGO COUNTY?

Wherever greenways are developed, they provide numerous and diverse benefits to local municipalities and their residents. This section of the plan focuses on those benefits that are especially applicable to greenways development in the Venango County. Such benefits include:

- promotes environmentally-sound land development
- promotes land and water restoration
- encourages a network of non-motorized and motorized land and water transportation corridors to connect people to our resources
- explores opportunities to expand motorized off highway vehicle and snowmobile trail opportunities
- conserves natural resource infrastructure resources
- builds capacity at the local level for implementation
- encourages economic development
- promotes healthy living
- enhances the quality of life

For example, greenway corridors established to preserve contiguous forest or open space protect habitat for wildlife, and in certain instances, habitat for threatened or endangered species. Greenways along rivers, streams, lakes, and reservoirs may have multiple advantages, such as habitat protection, flood control, and drinking water protection. Corridors link areas of farmland and open space help to preserve the rural landscape and way of life. Many of these benefits are interrelated and work together to bolster quality of life in the region. For example, providing transportation alternatives in the form of trails, shared use paths, or safe routes to school leads to better health and fitness. Similarly, conserving historic and cultural resources supports economic prosperity by attracting visitors from outside and inside the region.

Northwest Pennsylvania contains a diversity of environmental, cultural, and historic resources. Municipalities, counties, and regional partnership organizations are committed to plan for the future of the region by promoting and conserving our resources, utilizing a green infrastructure planning approach. Further, these entities are also committed to connecting our residents to our resources by expanding existing and establishing new recreation greenways throughout Venango County.

The process of establishing a greenway network in Northwest Pennsylvania will not take away the rights of property owners, nor will it restrict development in the region. The greenway network will promote sustainable development; reduce development costs; and reduce the burden of providing public services on local, county, and state governments.

PRESERVING VENANGO COUNTY'S DEFINING CHARACTERISTICS

Maintaining and conserving Venango County's open spaces and natural resources is now of greater importance than ever. Conservation of these assets can play a key role in establishing a high quality of life for ourselves and future generations. Residents enjoy the natural and recreational resources that set their community or region apart. Deep hollows and steep hillsides of the Oil Creek valley, the Wild and Scenic Allegheny River, the biologically diverse French Creek corridor, the picturesque Victorian City of Franklin, historic Oil City, charming Emlenton Borough, and historic oil heritage sites are all part of the unique character of Venango County. Visitors to the area are often charmed by the quaint antique shops of Oil City, Emlenton, and Franklin; stunned by the beauty and diversity of the Allegheny River, French Creek, and Oil Creek; or find pleasure in the recreational trails provided throughout the County.

Venango County has many recreational assets, including Oil Creek State Park; Two Mile Run Park; Clear Creek State Forest; several state game lands; and many existing trail opportunities, including a section of the North Country National Scenic Trail. These resources provide a variety of opportunities for biking, hiking, fishing, hunting, boating, snowmobiling, wildlife viewing, and other pastimes.

In addition to its abundant natural and recreational assets, Venango County also has a rich history that is well-preserved. A great deal of the historic resources within the County are associated with the Oil Heritage Region. This region is comprised of several significant sites, structures, and events that shaped the world's oil industry. Some of these sites include Drake Oil Well and the site of Pithole City. Additional historic sites, such as the Indian God Rock Petroglyphs Site and Rockland Furnace, provide opportunities for increasing tourism to the County. The county also boasts five historic districts including the Franklin Historic District, Emlenton Historic District, Oil City Downtown Commercial Historic District, Oil City North Side Historic District, and the Oil City South Side Historic District. Greenways linking historic resources with the County's recreational amenities will increase their accessibility and attract more tourists.

EXPANDING THE ECONOMY

While Venango County's economy has not been booming in recent years, the Oil Region Alliance provides the opportunity for job creation by attracting new industry and business, as well as assisting existing companies to expand. The Oil Region is located within 500 miles of many of the largest population centers in the United States. More than a third of the U.S. population lives within this radius, including a major portion of Canada's population. These markets include New York, Philadelphia, Chicago, Washington D.C., Detroit, and Toronto. All are easily accessible by the region's air, rail, water, and Interstate transportation links.

Existing and proposed greenway initiatives have the opportunity to have positive economic development impacts on Venango County's canoe and kayak liveries, bed and breakfasts, bike rental establishments, local eateries, and hunting and fishing supply stores.

Tourism/Eco-Tourism

National surveys suggest that outdoor recreation participation continues to increase with the five fastest growing pursuits being: birding, hiking, backpacking, snowmobiling, and walking (Cordell and Herbert 2002). Ninety-seven percent of all Americans over the age of sixteen participate in some sort of outdoor recreation, with thirty-three percent of Americans reporting that they go bird-watching (Cordell and Herbert 2002).

Venango County's proximity to major population centers, such as Cleveland, Buffalo, and Pittsburgh; as well as its situation near major transportation routes like U.S. Interstate 80 make it a logical place for development in one of the fastest-growing sectors in Pennsylvania's economy: Recreational and Eco-Tourism. According to the DCNR, tourism is the second largest industry in the Commonwealth, and nearly one-fifth of Pennsylvania's tourists travel to enjoy its outdoor amenities.

Venango County contains numerous natural and recreational resources that are important assets for providing the potential for substantial growth in the travel and tourism sector. One of these assets includes Oil Creek State Park, which attracted more than eight hundred thousand visitors in 2006.

Hunting & Fishing

Hunting, fishing, and trapping activities account for \$9.6 billion dollars in annual value and create 88,000 jobs within Pennsylvania (Shafer et al. 2000). The \$9.6 billion dollars was more than half of the entire state budget in 1997, the year of the study. Between twenty-five and fifty percent of all hunting and

fishing trips involve state-owned land and water, while up to 40% involve private non-posted lands (Shafer et al. 2000).

Venango County provides excellent hunting opportunities within any of its five state game lands. State-wide, hunters spent over \$1.33 billion dollars on hunting trips in 1996.

According to recent studies, fishing is the most popular water-based recreation activity in Pennsylvania, with nearly twenty-eight percent of residents participating, for an estimated 3.2 million participants across the Commonwealth.

Fishing is a great economic asset in the County. Pennsylvania residents sixteen years and older spent \$800 million on fishing in the state and elsewhere in 2001. The average angler spent approximately \$632 on fishing in 2001. Within the Northwest region, there were 71,768 anglers in 2006. Based on the numbers from this study, these anglers contributed more than \$45 million to the local economy.

In 2008, there were seventeen trout-stocked streams in Venango County listed by the PA Fish and Boat Commission. The PA Fish and Boat Commission's report on *Angler Use, Harvest and Economic Assessment on Trout Stocked Streams in Pennsylvania* found that angling on trout-stocked streams contributed over \$65.7 million dollars to Pennsylvania's economy during the first eight weeks of the regular trout season in 2005. Additionally, angling on trout-stocked streams also supported 1,119 jobs in the state.

Boating

The PA Fish and Boat Commission's boating facts found that Pennsylvania residents spend \$1.7 billion on boating annually, including boat fishing. The average expenditure per recreational boater is \$274. The average recreational boater spends \$113 a year in direct boating expenses, including purchasing or renting of boats, fuel, boating supplies, maintenance and repairs, storage, and registration.

Wildlife Watching

The average bird watcher spends more than \$350 each year on travel and paraphernalia related to bird watching, while committed birdwatchers spend \$2000 or more annually, around half of which is on travel (USDI survey, 1993).

The total economic effect of non-consumptive bird and waterfowl recreation alone is estimated to be more than \$450 million per year in the state of Pennsylvania. Like other forms of outdoor recreation, non-consumptive wildlife recreation creates significant benefits for communities surrounding the recreation site.

2001 Economic Benefits of Watchable Wildlife Recreation in Pennsylvania, Southwick. Associates, Inc.

- In 2001, watchable wildlife recreation generated twice the value produced by Pennsylvania's farms and three times the total moviegoers spent to see 2001's top-grossing film, "Harry Potter."
- Watchable wildlife generated \$70 million in state sales federal taxes; and \$962 million in retail sales, including food, travel and lodging, in 2001.
- Watchable wildlife recreation supports almost 19,000 employees with total wages of more than \$509 million.
- Wildlife viewing expenditures in Pennsylvania, during 2001, exceeded all of the money spent nationally on skiing and snow-boarding.
- Watchable wildlife recreation overwhelmingly benefits times of the year when other income sources are low.

Many hunters and fishermen participate in non-consumptive wildlife activities. Sportsmen report spending \$93 million to observe and attract wildlife to their homes. They spend \$860 million in wildlife-associated trips away from the home, spending on average \$33 per wildlife viewing trip.

Greenways

The economic benefits of greenway development are well-documented by several studies completed along developed trails.

In 2007, the Oil Region Alliance and Allegheny Valley Trails Association published a study of the trail system within the Oil Heritage Region. The study, *Trail Utilization Study: Analysis of the Trail Systems within the Oil Heritage Region 2006* concluded that trail users were having a measurable, positive impact on the Oil Region's economy. Specifically, the report stated:

- It is estimated that 160,792 trail users frequented the trail system, within the Oil Heritage Region in 2006, creating an overall estimated economic impact of roughly \$4.31 million.
- Approximately seventy-five percent of surveyed trail users cited the trails as their main reason for visiting the Region. The majority of the trail users visit the trails a few times a year. Seventy-seven percent of the users are day trip users who prefer to visit in the autumn and summer seasons. The users who do stay overnight tend to stay for two nights on average and often in campgrounds.
- Trail users surveyed were predominantly from Pennsylvania. Only twenty-three percent of in-state users were categorized as living in the Oil Heritage Region.
- Trail users typically access the trails with at least one other person and travel, on average, a distance of 33.25 miles to get to the trail system.
- Non-local trail users spent an average of \$32.93 per person per day, while those users categorized as living in the Oil Heritage region spent an average of \$3.71 per person per day.
- During the time period of this study, between July and October of 2006, trail users created an economic benefit of \$2.22 million within the Oil Heritage Region.

This study, along with other similar studies completed, including: Heritage Rail Trail County Park 2007 User Survey and Economic Impact Analysis; Pine Creek Trail 2006 User Survey and Economic Impact Analysis; and, the 2002 User Survey for the Allegheny Trail Alliance confirm there are positive economic impacts associated with the development of these trails.

Moreover, greenways can encourage new residents to settle in an area. Young people and families are attracted to places that provide opportunities for easy access to outdoor recreation. Greenway trails provide such accessibility since they connect population centers to parks and other natural amenities. Furthermore, to cater to the needs of recreational users, new service businesses, such as bike shops, canoe & kayak rentals, outdoor equipment stores, restaurants, campsites, and bed and breakfasts often spring up around recreational greenways.

Beyond the direct economic benefits of greenways, other less-tangible but very important fiscal impacts may be attributed to greenway development. For example, when looking for places to relocate or expand their businesses, employers look at a variety of factors including amenities for their employees. Workers, particularly young people, are attracted to places that provide opportunities for easy access to outdoor

recreation. Greenways and trails provide such accessibility since they connect employment centers to parks and other natural amenities.

In *Benefits of Greenways*, DCNR noted that in 2002, recreational tourism accounted for 459,000 jobs statewide, an increase of 100,000 from 1998. Moreover, the report noted that “there is also evidence to demonstrate that communities with recreational greenways have witnessed significant increases in real estate values.”

Proximity to nature increases the desirability and value of residential property, a factor that increases the profitability of real estate development and the attractiveness of towns, cities, and regions. People have become increasingly willing to pay more to live near natural areas. For example: the Rocky Mountain Institute found that 48 percent of Denver residents were willing to pay more to live near a park or greenbelt in 1990, compared to 16 percent in 1980. In Tucson, Arizona, researchers found that a single-family house near a wildlife habitat would command a price premium of \$4,576 compared to a comparable house a mile farther from the wildlife habitat. This same study found that proximity to a golf course only resulted in a premium of \$2,215.

Conservation Subdivision Design: Price Premiums

Conservation subdivisions have been described as “golf course communities...without the golf courses”. A conservation subdivision involves the same attention to site design and the same economic dynamics as a golf course community; a small lot with access to a shared amenity commands a premium price. In the case of a golf course community, the guarantee that the view of the golf course will not change and the exclusivity of the community contribute to desirability in the market, despite the more compact arrangement of houses on smaller lots. The same factors drive the market in a conservation subdivision. However, in a conservation subdivision, the shared amenity is protected open space instead of a golf course.

"Walking and biking paths" ranked third among thirty-nine features identified by homebuyers as crucial factors in their home-purchasing decisions, according to a 1994 study by American Lives, a research firm serving the real estate industry. "Community designs that deliver low traffic and quiet streets" were ranked first, and "lots of natural, open space" was second.

Recently published research comparing conservation subdivisions to conventional subdivisions indicates that lots in conservation subdivisions can provide higher profits to developers. The study, which was conducted in Rhode Island, concludes that lots in conservation subdivisions:

- ✓ carry a price premium - \$13,000 to \$18,000 per acre over conventional subdivision lots
- ✓ are cheaper to build - average of \$7,400 less to produce a lot
- ✓ sell more quickly - average selling time of 9.1 months, compared to 17.0 months for conventional subdivision lots

Source: The Economics of Conservation Subdivisions: Price Premiums, Improvement Costs, and Absorption Rates, by Rayman Mohamed. Published in *Urban Affairs Review*, January 2006

A Michigan study of values and priorities in choosing a home site concludes that “nature view from home” was by far the highest priority for residents of conservation subdivisions and conventional subdivisions. The study also concludes that conservation subdivision residents had a far higher level of satisfaction with the nearby environment than their counterparts in conventional subdivisions.

Source: Open Space Communities: Resident Perceptions, Nature Benefits, and Problems with Terminology, by Kaplan, Austin, and Kaplan. Published in the Journal of the American Planning Association, summer 2004

Economic Benefits of Being Physically Fit

Many studies have concluded that there are economic benefits associated with being physically fit, such as:

- ✓ Lower medical costs, fewer insurance claims
- ✓ Increased job productivity
- ✓ Decreased absenteeism, depression, and job turnover
- ✓ Prevention of disability

Greenways and trails provide opportunities for maintaining a physically fit lifestyle.

Transportation Benefits

One quarter of all trips taken by Americans are under a mile, but seventy-five percent of those trips are done by car, and only one third of school children who live less than a mile from school now walk to school.

On-road bicycle facilities, sidewalks, and trails encourage:

- ✓ The use of non-polluting transportation alternatives to the automobile for those short trips to work, school, or the local store
- ✓ The use of non-consumptive transportation alternatives to expending fossil fuels
- ✓ Reducing congestion
- ✓ Improving air quality
- ✓ Providing safe alternatives to residents
- ✓ Provides cost savings in car and road maintenance
- ✓ Enhances quality of life

According to the U.S. Bureau of Transportation Statistics:

- The average pedestrian's trip for recreation purposes is 1.9 miles
- The average pedestrian's trip for non-recreation purposes is 0.8 miles
- The average bicyclist's trip for recreation purposes is 5.6 miles
- The average bicyclist's trip for non-recreation purposes is 2.2 miles

There are many opportunities to expand choices for alternate modes of transportation, such as developing safe routes to schools and expanding the roadway network to include bicycle facilities.

Recreation Benefits

Greenways offer opportunities for recreation, health, and fitness. Many studies have shown that as little as 30 minutes a day of moderate to intense exercise can improve a person's mental and physical health and prevent certain diseases. Studies also support the premise that Americans place a high priority on having trails and open space in their community for recreation purposes.

Greenways and trails:

- ✓ Support a wide variety of recreation uses
- ✓ Provide for the restoration and interpretation of historic sites
- ✓ Provide connectivity between rural areas and the main street centers
- ✓ Enhances the quality of life for residents
- ✓ Connects Pennsylvania with its neighboring states, Ohio to the west, New York to the north, and Maryland and West Virginia to the south
- ✓ Connects residents with the environment and our natural resources

HEALTH AND WELLNESS BENEFITS

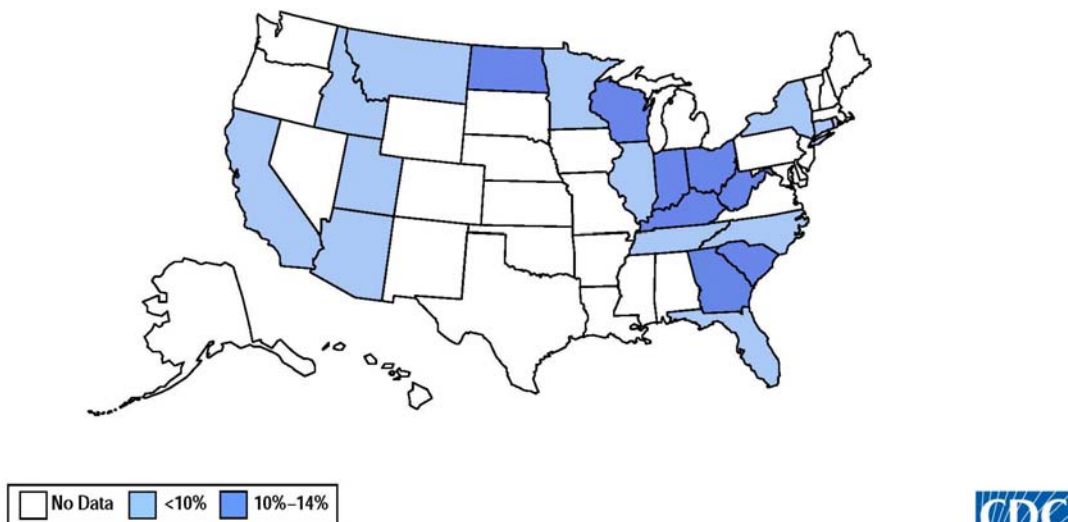
Trails and greenways create healthy recreation and transportation opportunities by providing people of all ages with attractive, safe, accessible, and low- or no-cost places to cycle, walk, hike, jog, or skate. Trails help people of all ages incorporate exercise into their daily routines by connecting them with places they want or need to go. Communities that encourage physical activity by making use of the linear corridors can see a significant effect on public health and wellness.

The U.S. Department of Health and Human Services' Center for Disease Control has been tracking obesity rates in the United States since 1985. Between now and then there has been a dramatic increase in obesity in the United States.

Obesity Trends* Among U.S. Adults

BRFSS, 1985

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)

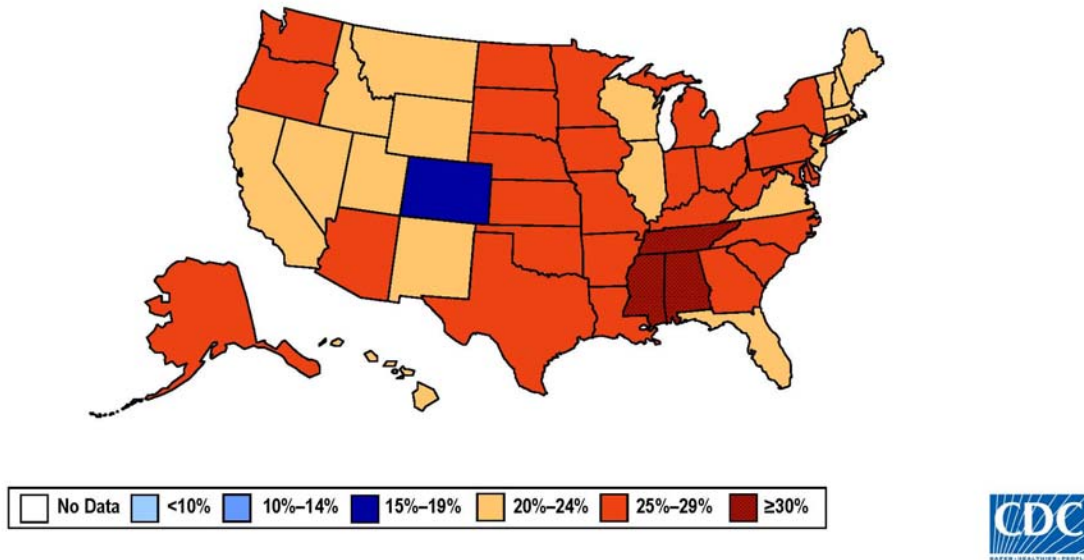


Source: CDC Behavioral Risk Factor Surveillance System.



Obesity Trends* Among U.S. Adults BRFSS, 2007

(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



In 2007, only one state had a prevalence of obesity less than 20%. Thirty-two states had prevalence equal or greater than 25%; six of these states had a prevalence of obesity equal to or greater than 30%.

The Rails to Trails Conservancy's fact sheet "Health and Wellness Benefits" provides the following facts on how greenways and trails benefit health and wellness:

- ✓ In addition to helping control weight, opportunities for physical activity help to prevent heart disease, helps control cholesterol levels and diabetes, slows bone loss associated with advancing age, lowers the risk of certain cancers, and helps reduce anxiety and depression. The power of physical activity to improve mood and prevent disabilities and chronic diseases is especially pronounced for older adults.
- ✓ Trails connect people with places, enabling them to walk or cycle to run errands or commute to work. A majority of the daily trips people make are short, providing an opportunity for physical activity that can be built into the daily routine.
- ✓ Trails connect neighborhoods and schools so children can cycle or walk to their friend's homes or to school, especially in communities that lack sidewalks.
- ✓ Trails and greenways provide natural, scenic areas that cause people to actually want to be outside and be physically active. The City of Pittsburgh has transformed unsightly urban decay into an inviting and popular greenway and trail with the Three Rivers Heritage Trail System. This trail attracts visitors, businesses, and residents.

ECOLOGICAL BENEFITS

The ecological benefits of greenways are most likely some of the most important benefits provided to humankind. However, they generally are the least understood and valued. These ecological benefits are expensive to replace with artificial means to achieve their functions. Ecological benefits include:

- ✓ Preserving vital habitat corridors
- ✓ Promoting plant and animal species diversity
- ✓ Absorbing contaminants of surface runoff
- ✓ Cleansing and replenishing the air
- ✓ Buffering the negative effects of development
- ✓ Mitigating noise, water, thermal, and air pollution
- ✓ Controlling property damage due to flooding

EDUCATIONAL BENEFITS

Greenways and trails provide educational benefits from a variety of perspectives including cultural, historical, and environmental interpretation.

Our best link to our future can be by examining our past. Greenways serve to promote the unique history and culture of towns, cities, and villages all across Pennsylvania by providing:

- ✓ Access to buildings of historic and architectural significance in a community
- ✓ A look back at the events and people that shaped the present
- ✓ An opportunity to preserve historic assets and archeological artifacts

Natural areas that are set aside for educational purposes provide immeasurable opportunities for people of all ages to learn and interact with their natural surroundings. Greenways:

- ✓ Act as living museums, outdoor classrooms, and laboratories
- ✓ Provide scenic excursions along water trails or wildlife preserves
- ✓ Assist students, both young and old, in developing concepts and skills by helping them become effective stewards and decision makers concerning our natural resources
- ✓ Promote and encourage interaction with our natural surroundings

PROTECTING PENNSYLVANIA'S RURAL LEGACY

Pennsylvania's rural landscape is an inextricable link to its history, as well as a demonstration of the success that continues to be achieved by its farming community. Studies demonstrate that Pennsylvania has lost much of its agricultural land over the last twenty-five years to urban areas. This rate of loss has a sizeable economic impact, but it also threatens the unique characteristics that encompass Pennsylvania such as its rural legacy. Development without preservation of this rural character significantly impacts the future course of the Commonwealth. Greenways help to preserve the rural character of a community by:

- ✓ Protecting ridge lines, river corridors, and scenic resources
- ✓ Providing visual relief by framing and distinguishing neighborhoods in the face of sprawl
- ✓ Preserving farmland, small country settlements, and surrounding open space
- ✓ Maintaining the character of place

ECONOMIC BENEFITS OF NATURAL SYSTEM GREENWAYS

Probably the least understood and least quantified aspect of greenways is the impact of natural resource greenways to the economy. There are tourism dollars generated from County residents and visitors to the County that otherwise would not be realized if it weren't for the natural resources that support them. These tourism dollars would be non-existent if the resources which create habitat, create recreation opportunities, and create Venango County's character did not exist.

The natural resources along Venango County's waterways cleanse water, provide for the temporary storage of flood waters, and provide ground water recharge zones. Without these resources in place, a significant cost would be realized to build additional infrastructure to replace these functions. Further, the single aspect of temporarily storing floodwaters provides a major financial benefit by controlling property damage that may be caused by flooding. By eliminating these storage areas and increasing impermeable surfaces, the risk of flooding is increased, and an expense is incurred during development to mitigate their negative effects.

CONSERVING PRIORITY HABITATS

Venango County contains a variety of forests, wetlands, rivers, natural areas, and streams, as well numerous conservation holdings. All of these features provide habitat for a wide array of plants and animals. Within the Venango County Natural Heritage Inventory (NHI) draft data provided to the consultant in 2008, the Pennsylvania Natural Heritage Program will be identifying natural areas that serve as critical habitat for species of special concern or that host a variety of habitats and landscape features warranting conservation. Additionally, the Pennsylvania Audubon Society has identified one (1) Important Bird Area (IBA), the Oil Creek State Park IBA, considered to be essential for sustaining wild bird populations, in Venango County.

Greenway implementation strategies developed through this planning process will help to conserve these sensitive resources and promote development that respects these resources.

SOUND LAND USE AND SUSTAINABLE GROWTH

Proper planning is essential for ensuring new residential, commercial, and industrial development is implemented in a manner that respects the County's natural infrastructure, along with the aforementioned cultural, historic, and scenic resources.

An example of responsible land use is the in-fill development of land in existing areas of urban or suburban development. For example, developing land in an existing industrial park rather than previously undisturbed land, provides easier access to utilities and resources, while preserving an existing area of open space.

It is important to note that a thoughtfully-developed Greenway Plan does not oppose development, but rather identifies ways to integrate it with conservation practices. Thus, economic growth will occur in planned areas and will result in healthier communities, economically, socially, and environmentally.

HOW IS A GREENWAY PLAN DEVELOPED?

For many, the term greenway evokes visions of recreational and outdoor pursuits. For others, the term greenway evokes concern over restrictions to development and the loss of property rights. Throughout the planning process, great efforts were taken to ease these concerns; educate the public to confirm the truth and dispel myths on what greenways are and are not; and build consensus by establishing defensible rationale for establishing a greenway network through the Northwest Pennsylvania Region.

The process of establishing a greenway network in Northwest Pennsylvania will not take away the rights of property owners, nor will it restrict development in the region. Instead, the greenway network will promote sustainable development, reduce development costs, and reduce the burden of providing public services on local, county, and state governments.

THREE – STEP PROCESS

Sound Greenway planning uses a three-step process that answers three basic questions:

1. *Where are we now?* - This is the inventory phase. In this phase, information was gathered on the natural and cultural assets of the County that may form the building blocks of conservation or recreation corridors. For example, information was obtained about important habitat areas warranting protection, as well as abandoned rail corridors that could be converted to recreational trails.
2. *Where do we want to be?* - In this phase, “vision” was developed. Specifically, the plan synthesizes the information gathered during the inventory phase into a proposed network of greenways and trails linking important destinations throughout the County.
3. *How do we get there?* - This step provides information about how the plan can be implemented. It includes concrete tools such as a recommended management structure, prioritized trail and greenway segments, and potential funding sources.

PUBLIC PARTICIPATION

Greenway planning also involves an intensive public participation process that solicits knowledge and expertise from local residents and officials - those who know Clarion, Crawford, Erie, Forest, Venango, and Warren County’s best. During this process, input is obtained by the following methods:

- Study Committee Meetings
- Public Meetings
- Key Person Interviews
- Field Visits

PURPOSE OF THE GREENWAYS PLAN

With the aforementioned benefits and planning process in mind, this plan examines the various methods by which a greenway network can be developed for Venango County. Once developed, this network will help preserve the region’s essential natural resources and, in turn, its unique character, while enhancing the quality of life for its residents.

The purpose of this project is to develop a network of connections among the diverse natural areas; various cultural, historic, and recreational resources; and local population centers. These connections will help to preserve natural resources and open spaces while providing valuable recreational opportunities for residents in Venango County.

GOALS AND OBJECTIVES

Greenways can serve many functions with regional and local impact. When determining the guiding principles used to designate greenways for Venango County, consideration was given to the objectives established in the early part of the planning process. The following goals and objectives offer insight into the function of the greenways to be developed in the County.

Venango County Greenways Plan

Preserving and enhancing Venango County's character and quality of life is the main goal of the Greenway Plan, and these specific objectives support this main goal:

- Protect existing natural areas primarily for ecological health and preservation of wildlife habitat;
- Promote the preservation of agricultural land;
- Provide recreational opportunities for County residents through preservation and connection of existing open spaces;
- Promote economic growth via recreational or eco-tourism;
- Encourage counties and local municipalities to work in unison to help protect their various resources by adopting open-space and land-use regulations; and
- Educate residents on the aspects and benefits of Greenways Planning, including the benefits of implementation of the goals listed above.

These goals and objectives support the two general functions that define proposed Greenways in Venango County:

1. Natural Systems Greenways are corridors whose primary function is preservation of unique Natural Infrastructure, including habitats such as wetlands, steep slopes, floodplains; exceptional value water-quality streams; high-value natural areas identified by the County Natural Heritage Inventory; Interior Forests; Important Bird Areas; and Important Mammal Areas. They are linear tracts of essentially undeveloped open space. Some low-impact activity, like hiking or wildlife observation, is acceptable in these corridors, but intense development and motorized vehicle use are not recommended.
2. Recreation and Transportation Greenways are corridors in which trail development is recommended or trails already exist. These greenways connect population centers and points of interest. They bring people in contact with the outdoors and engender an appreciation of the natural world. These trails also provide alternative, environmentally-friendly transportation opportunity for commuters and visitors. In some cases, recreation and transportation trails overlay areas where conservation of natural assets is also an objective. To avoid conflicts, recreation and transportation uses should be planned to minimize impacts. For example, a biking trail along a river or stream corridor should be designed to preserve steep slopes, wetlands, and other sensitive areas.

THE GREENWAY AND OPEN SPACE PLAN AS A DECISION-MAKING TOOL

Once finalized and approved, the Greenway Plan will serve as a flexible tool for making decisions regarding the conservation of natural, cultural, historic, and scenic resources. By encompassing a variety of issues pertinent to these resources, the plan will lay the foundation for the continued success of open space conservation and increased quality of life in Venango County. Specific policy details and greenway locations may be adjusted as needed throughout the planning process and implementation.

Sound Greenway Planning includes inventory and analysis of natural features, cultural and historic sites, and open spaces, such as parks or nature reserves; along with collaboration with local government agencies, private groups, and interested citizens to form policies for development and/or conservation. This multi-layered approach, involving Venango County and its decision-makers, yields short-, medium-, and long-term strategies for natural resource conservation and greenway development, in harmony with any potential economic development.

HOW DO WE GET THERE?

THE VENANGO COUNTY GREENWAYS PLAN

By taking the recommendations presented herein to heart, Venango County has the opportunity to:

- ✓ Guide growth and development in a sustainable manner
- ✓ Improve the economy in Venango County by enhancing tourism opportunities and venues and by providing goods and services to meet the needs of our residents and tourists
- ✓ Provide alternate forms of transportation to improve air and water quality and to reduce traffic congestion
- ✓ Connect its residents and neighborhoods to one another, its parks, schools, and cultural and natural resources
- ✓ Conserve natural resources, which provide life-sustaining functions and create the character of place, for current and future generations of Venango County residents

This plan presents the recommendations and defines the implementation strategies that must be completed in order to work towards establishing the vision for greenways in Venango County and the Northwest Pennsylvania region.

As a working document, it is expected and encouraged that the recommendations included in this plan be reviewed from time to time to determine whether any adjustments need to be made to reflect and acknowledge positive changes in greenway planning efforts. Before significant changes are adopted, a careful review of the entire document should be conducted to gain a thorough understanding of the process which leads to the recommendations outlined in this plan. Only upon completing this review, can prudent decisions be made related to the future of greenways in Venango County.

In their report “Back to Prosperity: A Competitive Agenda for Renewing Pennsylvania”, published in 2003, the Brookings Institution Center on Urban and Metropolitan Policy identified many concerns related to Pennsylvania’s growth, and lack thereof, over the past two decades. These issues include population migration, urban sprawl, and the consumption of land despite a stagnant population. They are concerned these trends are damaging to Pennsylvania’s economy. Further, the report goes on to recommend solutions to reversing these trends and rebuilding Pennsylvania. Some of the strategies recommended include planning and collaboration at the regional level; conserving our resources; and reinvesting in our main streets and downtowns, in lieu of consuming more land.

By its very nature, greenway planning and implementation can begin to positively address the concerns raised and implement some of the strategies recommended in the Brookings Institute’s report. It is important to realize that greenways are much more than conservation of our natural resources and trails for recreation. As discussed in the Introduction of this plan, greenways provide many benefits that are considered by many to be more significant.

PLAN ORGANIZATION

The Venango County Greenways Plan is organized in a logical format that follows the structure proposed for implementing the recommendations contained herein.

1. Management Structure
2. The Vision for Venango County’s Greenway Corridors
3. Implementation Strategies

MANAGEMENT STRUCTURE

As the Northwest Greenways planning effort was beginning, a peer study to determine the potential need and management structure for an Oil Region Greenways and Open Space professional staff employee was concluding. This peer study was being conducted in conjunction with a circuit rider application to the Pennsylvania Department of Conservation and Natural Resources to fund an Oil Region Greenways and Open Space Coordinator position.

As a result of the study, an Oil Region Greenways and Open Space Steering Committee was established to hire and manage the new Coordinator. The study can be viewed at the office of the new Committee. PA DCNR concurred and funded the Oil Region Greenways and Open Space Coordinator position through a Circuit Rider grant awarded to Crawford County, a governmental agency and one of the Steering Committee members. In the summer of 2008, a coordinator was hired. The Committee consists of representatives from the following public and private agencies:

- Allegheny Valley Conservancy
- Allegheny Valley Trails Association
- City of Franklin
- City of Oil City
- City of Titusville
- Clear Lake Authority
- Cornplanter Township
- Cranberry Township
- Crawford County
- Emlenton Borough
- Foxburg Borough
- Franklin Industrial & Commercial Development Authority
- Friends of Oil Creek State Park
- Oil Creek State Park
- Oil Region Alliance of Business, Industry & Tourism
- Venango County

The purpose of the Oil Region Greenways and Open Space Coordinator is to coordinate greenways and open space projects in the areas of design, development, and maintenance for the Oil Region National Heritage Area.

DCNR's Circuit Rider Program is designed to provide initial funding for County or regional organizations to hire a professional, full-time staff person – in this case the Oil Region Greenways and Open Space Coordinator. Eligible project costs include only the circuit rider's salary and DCNR-approved technical assistance and training expenses as follows:

- First Year: up to one hundred percent of gross salary
- Second Year: up to seventy-five percent of gross salary
- Third Year: up to fifty percent of gross salary
- Fourth Year: up to twenty-five percent of gross salary
- Training Expenses: up to \$2,000 available for Bureau-approved training expenses over the four years of funding

The participating parties, which are the members of the Oil Region Greenways and Open Space Steering Committee, must provide local funds to cover the circuit rider's employee benefits for all four years; the balance of the salary in years two, three, and four; and normal support services, such as office space and

Venango County Greenways Plan

furnishings, training and travel expenses, clerical support, equipment, etc. Startup costs will need to be allocated in the first two years of operation to acquire office furniture and equipment.

The fiduciary responsibility of the Regional Greenways Coordinator is performed by the Franklin Industrial & Commercial Development Authority (FICDA), under the direction of the Oil Region Greenways and Open Space Steering Committee, as per the terms of the contract between the Pennsylvania Department of Conservation and Natural Resources and the County of Crawford, the Memorandum of Understanding between the County of Crawford and FIDCA, and the Memorandum of Understanding between the FICDA and the members of the Oil Region Greenway and Open Space Committee, on which Venango County participates.

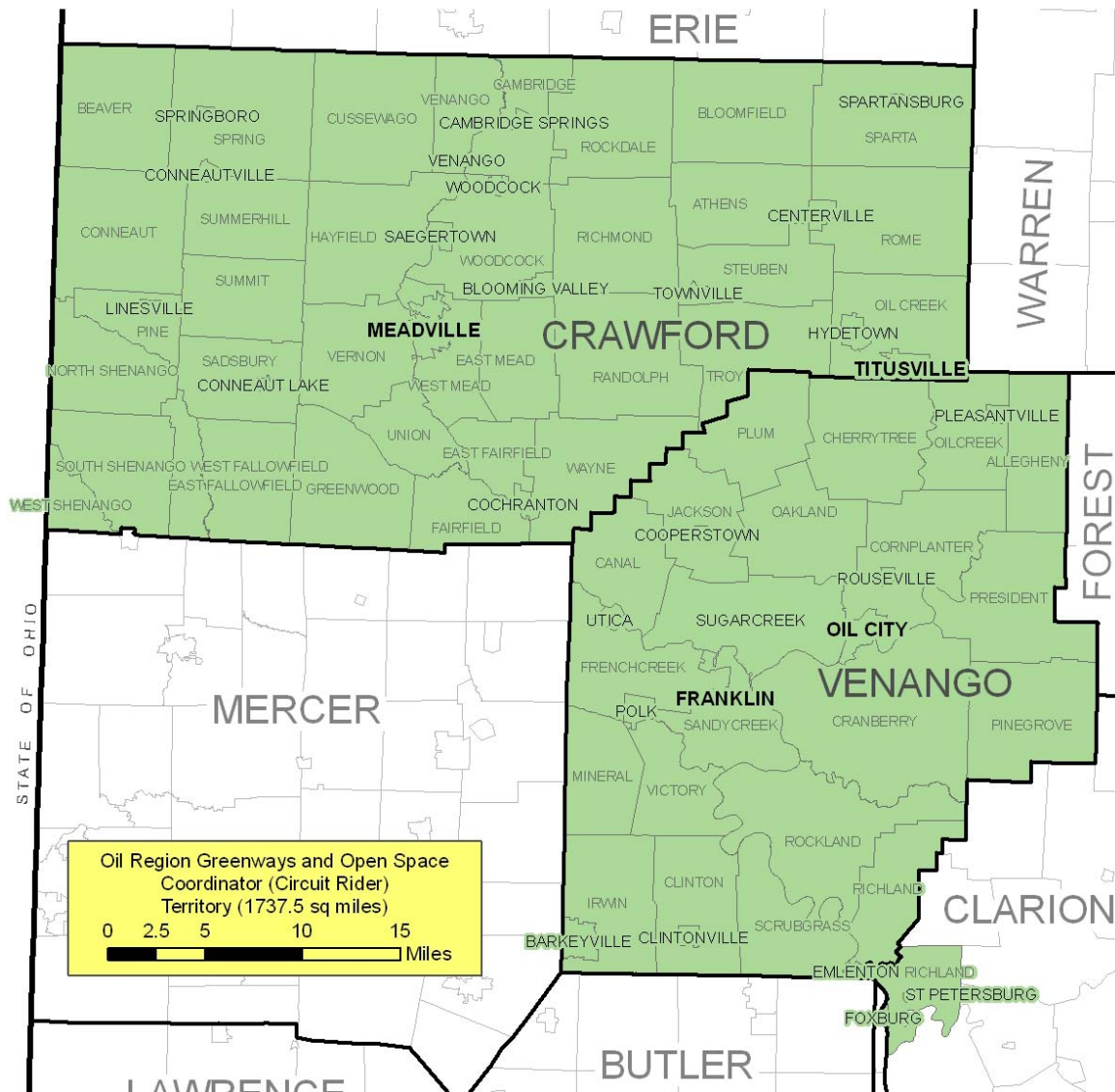
The Oil Region Greenways and Open Space Coordinator's essential position functions, as documented by the Oil Region Greenways and Open Space Committee, including the following tasks:

- ✓ Develop appropriate administrative procedures that are consistent with the objectives of the Northwest Pennsylvania Greenways and Trails Plan, the Venango County Comprehensive Recreation and Open Space Plan, and other plans that provide direction for greenways and open space in the Oil Region National Heritage Area
- ✓ Serve as a first point of contact
- ✓ Increase awareness of greenways and open space and their benefits
- ✓ Assist with the coordination of events and volunteer activities
- ✓ Provide technical and planning assistance to municipalities and organizations
- ✓ Coordinate specific greenways acquisition and development projects
- ✓ Make recommendations to municipal boards and councils regarding updates and amendments to local ordinances as they relate to greenways (both recreation and conservation) and open space programs
- ✓ Educate elected officials on the value of conservation planning and encourage municipalities to adopt a conservation-based approach to land development
- ✓ Serve as an advocate for the Oil Region National Heritage Area and contiguous trails with the Erie to Pittsburgh Trail Alliance
- ✓ Prepare and/or assist in the preparation of maps and other GIS-related information

The Oil Region Greenways and Open Space Coordinator's geographic region has been defined by the committee as the Oil Region National Heritage Region, which includes all of Venango County; and Oil Creek Township, City of Titusville, and Hydetown Borough in Crawford County. In addition, the region may also include greenways and trails that are contiguous with and extend beyond the Oil Region into Clarion and Crawford Counties, including:

- Clarion County: The Allegheny River Trail from Emlenton through Foxburg to Parker Landing, including the municipalities of Richland Township and Foxburg Borough
- Crawford County: Trails in the City of Titusville, Oil Creek Township, and heading northward, including the municipalities of Hydetown, Centerville, Spartansburg Boroughs, and Rome and Sparta Townships
- Parts of the proposed Erie to Pittsburgh Trail

In the beginning of 2009, the geographic region was expanded to include all of the municipalities in Crawford County.



Members of the Oil Region Greenways and Open Space Steering Committee have committed to participate on the committee for a period of five years. However, they do have the option to re-evaluate their participation on the committee, due to budgetary constraints, on an annual basis. PA DCNR's circuit rider funding is committed to this position for a period of four years, with the expectation the position will be self-sustaining in year five.

With the Oil Region Greenways and Open Space Coordinator in place, the Venango County, and the remaining members of the Oil Region Greenways and Open Space Steering Committee, are well-positioned to implement the recommendations and implementation strategies contained in this plan.

THE VISION FOR VENANGO COUNTY'S GREENWAYS

A detailed inventory and analysis of the greenway planning process was completed for Venango County. That work is documented in the Appendices. Through this work, greenway corridors were identified and prioritized as documented herein. The proposed greenway corridors for Venango County consist of the natural systems greenways and recreation and transportation greenways.

THE STRUCTURE OF THE NETWORK

Building the framework of the greenway network began with laying out the Natural Systems Greenways. These corridors follow the existing natural features within the County, such as, forests, ridgelines, significant stream corridors, and wildlife habitats. Overlaying this Natural Systems backdrop, the plan adopts a “hubs and spokes” structure for its recreation and transportation greenways. Pennsylvania’s Plan entitled *Pennsylvania Greenways: An Action Plan for Creating Connections* describes the product of this overlay method as follows:

Pennsylvania’s greenways network will ultimately take the form of “hubs and spokes.” The “hubs” of this network will be the state’s parks, forests, game lands, lakes, and other destinations, including our towns. The “spokes” of the network will be greenways – connecting our natural areas and recreational and cultural destinations with the places where we live. The landscape connections that will result throughout Pennsylvania will create a “green infrastructure” of open space vital to the health of Pennsylvania’s ecological systems and human communities.

The “hubs,” sometimes called nodes, are the significant destination points – trail towns and important recreation areas. The spokes or corridors will provide the links between them. In some areas, natural systems corridors are distinct from recreation and transportation greenways; in other cases, they coincide. Finally, because streams, mountain ridges, wildlife habitats, state parks, and some recreation and transportation trails do not terminate at the County’s boundaries, the greenways network proposes that recreation and transportation corridors continue outward and form connections to natural and recreational assets in neighboring counties and states.

PROPOSED NATURAL SYSTEMS GREENWAY CORRIDORS

The process of developing a Natural Systems Greenways network utilized a green infrastructure approach in identifying the building blocks which contribute to region’s well-being and identified strategies to assure these resources are available to provide their valuable functions for future generations of Venango County residents. The process of establishing this network in Venango County will not take away the rights of property owners, nor will it restrict development in the region. Instead, Natural Systems Greenways will promote sustainable development, lower development costs, and reduce the burden of providing public services on local, county, and state governments.

Green infrastructure is defined as an interconnected network of natural areas and other open space that helps preserve natural ecosystem values and functions, sustains clean air and water, and provides a variety of benefits to people and wildlife. This plan differs from conventional approaches to natural resource conservation, as it looks at conservation in harmony with development. This approach will help communities develop, with minimal stress and negative impact on the sensitive environmental resources, which may be present.

Therefore, an inventory of natural and ecological infrastructure resources was conducted to enable the identification of the proposed Natural Systems Greenway building blocks.

The Criteria

The process of identifying Natural Systems Greenway Corridors consisted of identifying natural infrastructure building blocks that warrant conservation. Those building blocks were identified by the project's steering committee by reviewing the natural and ecological resources of the County. Then, the selected building blocks were weighted based on their significance towards achieving the vision established for the Northwest Pennsylvania Greenways. The following spreadsheet identifies those building blocks and their associated values.

Ranking Criteria	<div> <div>Less Important</div> <div> </div> <div>More Important</div> </div>									
	Value									
Component	1	2	3	4	5	6	7	8	9	10
Biological Diversity Area - No Activity										
Biological Diversity Area - Nature Observation										
Biological Diversity Area - Passive Recreation										
Wetland										
Slopes > 25%										
Biological Diversity Area - Active Recreation										
Floodplain										
Exceptional Value Stream										
Landscape Conservation Area - No Activity										
National Wildlife Refuge										
Landscape Conservation Area - Nature Observation										
High Quality Cold Water Fishery										
National Forest										
State Forest										
State Game Land										
Landscape Conservation Area - Passive Recreation										
Landscape Conservation Area - Active Recreation										
State Park										
Supporting Natural Landscape										
Interior Forest										
Exceptional Value Watershed										
Hydric Soils										
Important Bird Area										
Important Mammal Area										
Other Managed Land										
County Park										

The Process

The proposed Natural Systems Greenway Corridors were defined using this system of weighted values given to the building blocks. Each building block was then mapped individually, and all natural resources were overlaid utilizing a geographic information systems process. When more than one building block overlapped, their respective values were added together creating a cumulative value. Areas with the highest total values included the most building blocks, and thus merited inclusion in the Natural Systems Greenways network. Corridors were then defined and named based upon their watershed association. Additionally, the cumulative value of each corridor was used to establish priorities.

The Results

The analysis leads to recommending that specific areas of Venango County's natural landscape be conserved. There are fourteen Natural Systems Greenway corridors that are recommended for Venango County. They are as summarized as follows

Exceptional Value Natural Systems Greenway Corridors:

- 1) Sandy Creek Greenway - This corridor is situated in western Venango County, adjacent to South Sandy Creek, Sandy Creek, and Little Sandy Creek. Included within this greenway are State Game Land No. 39, Fisherman's Cove, and some privately-managed land within the State Game Lands. There may also be two biological diversity areas in this greenway.

This proposed greenway corridor is beneficial, as it can conserve resources along Little Sandy Creek, which carries the designation of a High Quality Cold Water Fishery .

Approximate Size: The total length of the Sandy Creek Greenway corridor is approximately 12.5 miles along Sandy Creek, 6.25 miles along Little Sandy Creek, and 10 miles along South Sandy Creek. The width varies from nearly a mile along Little Sandy Creek, near its headwaters at the Mercer County border, to less than 1,000 feet in numerous locations along all three creeks.

The total acreage of this greenway is estimated to be more than 7,000 acres, of which 39.9% is protected within the State Game Land, Fisherman's Cove, and the privately-managed land. Approximately 3.6% of this greenway is designated as developed or urban land.

Associated Municipalities: Frenchcreek, Sandycreek, Mineral, and Victory Townships and Polk Borough

- 2) Allegheny River Greenway – This greenway contains the Allegheny River Corridor, which enters the County from Forest County east of President and flows through Oil City and Franklin before exiting into Clarion County at Emlenton. Along this corridor, there may be two biological diversity areas, St. George, State Game Land No. 47, Clear Creek State Forest, Fisherman's Cove, Justus Trail, the Allegheny River Trail and Allegheny River Water Trail, and a section of the North Country National Scenic Trail.

This proposed greenway corridor is beneficial, as it can conserve the resources along the Allegheny River from Forest County to Oil City and from just south of Franklin to Emlenton, which carries a Wild and Scenic River designation.

Approximate Size: The total acreage of this greenway is estimated to be over 23,000 acres, of which 5.4% is protected within the State Game Land, State Forest, Crawford Reserve, and Fisherman's Cove. Approximately 4.4% of this greenway is designated as developed or urban land.

Associated Municipalities: Cornplanter, President, Cranberry, Sandy Creek, Victory, Rockland, Richland, Scrubgrass, and Clinton Townships, as well as Emlenton and Sugarcreek Boroughs, and the cities of Franklin and Oil City

- 3) Oil Creek Greenway – Situated in northern Venango County, this greenway corridor runs adjacent to Oil Creek, mostly within Oil Creek State Park. There may be one biological diversity area associated with this greenway, and the corridor is considered an important bird area because of its high diversity and substantial concentration of breeding forest birds.

Approximate Size: The total length of the Oil Creek Greenway corridor is nearly 17 miles. The width varies from just nearly a mile and a half in the northern section of the park to under 1,500 feet in Oil City.

The total acreage of this greenway is estimated to be over 6,000 acres, of which 57.5% is protected within Oil Creek State Park. Nearly 6.4% of this greenway is designated as developed or urban land.

Associated Municipalities: Oilcreek, Cherrytree, and Cornplanter Townships, as well as Rouseville Borough, and the City of Oil City

Significant Value Natural Systems Greenway Corridors

- 4) Hemlock Creek Greenway – This greenway is found in the eastern section of Venango County and also extends into Forest and Clarion Counties. This corridor may contain one biological diversity area as well as Crawford Reserve. Hemlock Creek is an exceptional value stream with potential for rare plants and animals.

Approximate Size: The total acreage of this greenway is estimated to be more than 8,000 acres, of which 8% is protected within State Game Land No. 47, as well as within Crawford Reserve. Approximately 1.8% of this greenway is designated as developed or urban land.

Associated Municipalities: President and Pine Grove Townships

- 5) Sugar Creek Greenway – Situated in northwestern Venango County, this greenway contains parts of State Game Land No. 96 and is found adjacent to Beatty Run, East Branch Sugar Creek, Foster Run, Lake Creek, Little Sugar Creek, Prather Creek, and Sugar Creek. There also may be one biological diversity area associated with this greenway.

Approximate Size: The total acreage of the Sugar Creek Greenway is estimated to be nearly 8,300 acres, of which 6.6% is currently protected in the state game lands. Approximately 6.2% of this greenway is designated as developed or urban land.

Associated Municipalities: Plum, Jackson, Oakland, Canal, and Cherrytree Townships as well as Cooperstown and Sugarcreek Boroughs

- 6) French Creek Greenway – This corridor is located in western Venango County, along French Creek and sections of Mill Creek, and a few additional tributaries of French Creek. There are seven Conservation Holdings along this greenway including: Stanley Goodblood Bird Sanctuary, Buttermilk Bluffs, Sugar Creek Landing, and Utica Island. Additionally, there also may be seven biological diversity areas along this corridor.

Approximate Size: The total acreage of the French Creek Greenway is estimated to be nearly 5,000 acres, of which 3.8% is currently being conserved and protected in the conservation holdings mentioned above. Approximately 8.4% of this greenway is designated as developed or urban land.

Associated Municipalities: Frenchcreek and Canal Townships, as well as Sugarcreek and Utica Boroughs, and the City of Franklin

- 7) East Sandy Creek Greenway – This greenway is situated in eastern Venango County. It encompasses sections of Burford Run, Halls Run, Pine Run, Pryor Run, Bear Run, and East Sandy Creek. It also includes part of State Game Land No. 45, and there may be one biological diversity area associated with this corridor.

Approximate Size: The total length of the East Sandy Creek Greenway corridor is over 11 miles along east Sandy Creek and an additional 3.5 miles along Pine and Bear Run. The width varies from around 1,000 feet by the mouth of Sandy Creek at the Allegheny River to nearly 4,000 feet at the confluence of East Sandy Creek and Pine Run.

The total acreage of this greenway is estimated to be more than 5,300 acres, of which 22.5% is currently protected in the state game land. Approximately 1.7% of this greenway is designated as developed or urban land.

Associated Municipalities: Cranberry, Rockland, and Richland Townships

- 8) Pithole Creek Greenway – This greenway is located in the northeastern section of Venango County along Schoolhouse Run, Otto Run, Neilltown Run, West Pithole Creek, and Pithole Creek. This greenway encompasses part of State Game Land No. 253, and there may be one biological diversity area associated with this corridor.

Approximate Size: The total length of the Pithole Creek Greenway corridor is approximately 13.25 miles along Pithole Creek and another 5 miles along West Pithole Creek. The total acreage of this greenway is estimated to be nearly 6,500 acres, of which approximately .2% is currently protected in the state game land. Less than 1% of this greenway is designated as developed or urban land.

Associated Municipalities: Cornplanter, Allegheny, President and Oilcreek Townships as well as a small portion of Pleasantville Borough

- 9) Tippery Greenway – This greenway is situated southeast of Oil City. It covers the area known as Tippery Meadows and encompasses sections of Halls Run, Wolf Branch, Tarklin Run, and Horse Creek. There may be one biological diversity area associated with this corridor.

Approximate Size: The total length the Tippery Meadows Greenway is over 7 miles. The width varies from nearly 3 miles crossing Hall and Tarklin Runs to approximately 3,700 feet near the mid-point of the greenway.

The total acreage of this greenway is estimated to be more than 8,700 acres, of which 14.8% is currently protected in State Game Land No. 47. Approximately 3% of this greenway is designated as developed or urban land.

Associated Municipalities: Cranberry, Pine Grove, and President Townships

- 10) Twomile Run Greenway – Situated in central Venango County, this greenway includes all of Justus Lake, Read Run, West Branch Twomile Run, and Twomile Run. There may be one biological diversity area associated with this corridor.

Approximate Size: The total length of the Twomile Run Greenway corridor is approximately 7.5 miles. The width varies from nearly 3,000 feet across Justus Lake to less than 1,000 feet in various sections.

The total acreage of this greenway is estimated to be nearly 2,800 acres, of which 28.5% is currently protected within Twomile Run County Park. Approximately 2.5% of this greenway is designated as developed or urban land.

Associated Municipalities: Oakland and Sugarcreek Townships.

High Value Natural Systems Greenway Corridors

- 11) Mill Creek/Kahle Lake Greenway – Situated in the southeastern section of Venango County, north of Emlenton, this greenway includes Mill Creek and all of Kahle Lake. It extends into Clarion County, and there may be two biological diversity areas associated with this corridor.

Approximate Size: The total length of the Mill Creek/Kahle Lake Greenway corridor is approximately 5.5 miles. The width varies from less than 2,000 feet near the bend in Mill Creek to 1.25 miles surrounding Kahle Lake.

The total acreage of this greenway is estimated to be over 1,800 acres, none of which is currently protected. Approximately 1.1% of this greenway is designated as developed or urban land.

Associated Municipalities: Rockland and Richland Townships

- 12) Scrubgrass Creek Greenway – This greenway is situated in southwestern Venango County and includes all of or sections of Trout Run, Gilmore Run and Scrubgrass Creek. There may be one biological diversity area associated with this corridor.

Approximate Size: The total acreage of this greenway is estimated to be nearly 9,000 acres, of which only 1% is currently protected within a small section of Clear Creek State Forest. Approximately 5.4% of this greenway is designated as developed or urban land.

Associated Municipalities: Irwin, Clinton, and Scrubgrass Townships as well as Clintonville Borough

- 13) Dennison Run Greenway – This corridor is located in southern Venango County adjacent to Dennison Run. The Dennison Run watershed is designated as Exceptional Value, and the entire greenway is part of the Allegheny River BDA. Additionally, this greenway is part of the Kennerdell Tract of Clear Creek State Forest and portions of State Game Land No.39.

Approximate Size: The total length of the Dennison Run Greenway corridor is approximately 3.25 miles. The width varies from nearly a mile and a half in the lower section near the Allegheny River to less than 500 feet at the headwaters of the stream.

The total acreage of this greenway is estimated to be around 1,300 acres, of which 85.2% is currently protected within the state game land and state forest. Less than 1% of this greenway is designated as developed or urban land.

Associated Municipalities: Victory and Clinton Townships

- 14) Patchel Run Greenway – This greenway is situated in central Venango County, adjacent to Patchel Run and its eastern tributaries. There may be one biological diversity area associated with this corridor.

Approximate Size: The total acreage of this greenway is estimated to be nearly 3,200 acres, none of which is currently protected. Approximately 2.3% of this greenway is designated as developed or urban land.

Associated Municipalities: Sugarcreek Borough

Venango County Greenways Plan

The following table provides a summary of Venango County's proposed Natural Systems Greenway corridors.

Priority	Ranking	Greenway Name	Sensitivity Ranking	Total Acres	Total Conserved Acres	Total Percent Conserved
Exceptional	1	Sandy Creek	25.0	7,048	2,811	39.9%
	2	Allegheny River	23.9	23,047	1,248	5.4%
	3	Oil Creek	23.3	6,008	3,455	57.5%
	4	Hemlock Creek	22.8	8,116	649	8.0%
Significant	5	Sugar Creek	21.6	8,293	544	6.6%
	6	French Creek	21.5	4,960	188	3.8%
	7	East Sandy Creek	21.4	5,347	1,204	22.5%
	8	Pithole Creek	21.2	6,453	16	0.2%
	9	Tippery	19.2	8,717	1,288	14.8%
	10	Twomile Run	19.1	2,747	782	28.5%
High	11	Mill Creek/Kahle Lake	18.8	1,822	0	0.0%
	12	Scrubgrass Creek	18.0	8,893	93	1.0%
	13	Dennison Run	17.1	1,349	1,149	85.2%
	14	Patchel Run	16.4	3,190	0	0.0%
Totals				95,990	13,427	14.0%

These proposed corridors are identified on the Venango County Greenways Map.

DISCUSSION REGARDING FOREST RESOURCES

Property owners, municipal and County officials, and others are often concerned that conservation of Natural Systems Greenways means limitations on timbering in the County. The Pennsylvania Municipalities Planning Code, Act of 1968, P.L. 805, No. 247, as reenacted and amended, ensures the right to timber by stating:

- Article VI, Section 603(f) states: “Zoning ordinances may not unreasonably restrict forestry activities.”
- Section 107(a) of the MPC defines forestry as follows: The management of forests and timberlands when practiced in accordance with accepted silvicultural principles, through developing, cultivating, harvesting, transporting, and selling trees for commercial purposes, which does not involve any land development.
- Municipal ordinances must allow forestry activities as a use by right in all zoning districts.
- Restrictions on forestry activities are reasonable if contained in the ordinance, but no additional requirements may be added at the time of issuance of a permit.
- Ordinances that prohibit forestry activities in any zoning district or permit forestry activities only by special exception, conditional use, or variance are not valid. Such ordinances are effectively repealed by the provisions of Act 68.
- Restrictions on forestry activities that appear only in special exception or conditional use provisions of an ordinance may not be enforced.
- Many municipal ordinances require the issuance of a zoning permit to proceed with forestry-related activities. If a permit application is denied, an appeal may be filed with the zoning hearing board in accordance with the provisions of the MPC.
- Timber harvesting activities that are part of a land development and subdivision plan do not fall within the definition of forestry activities and are not a permitted use by right under the MPC.
- Municipalities are not authorized to assume whether an applicant intends to develop the land subsequently.

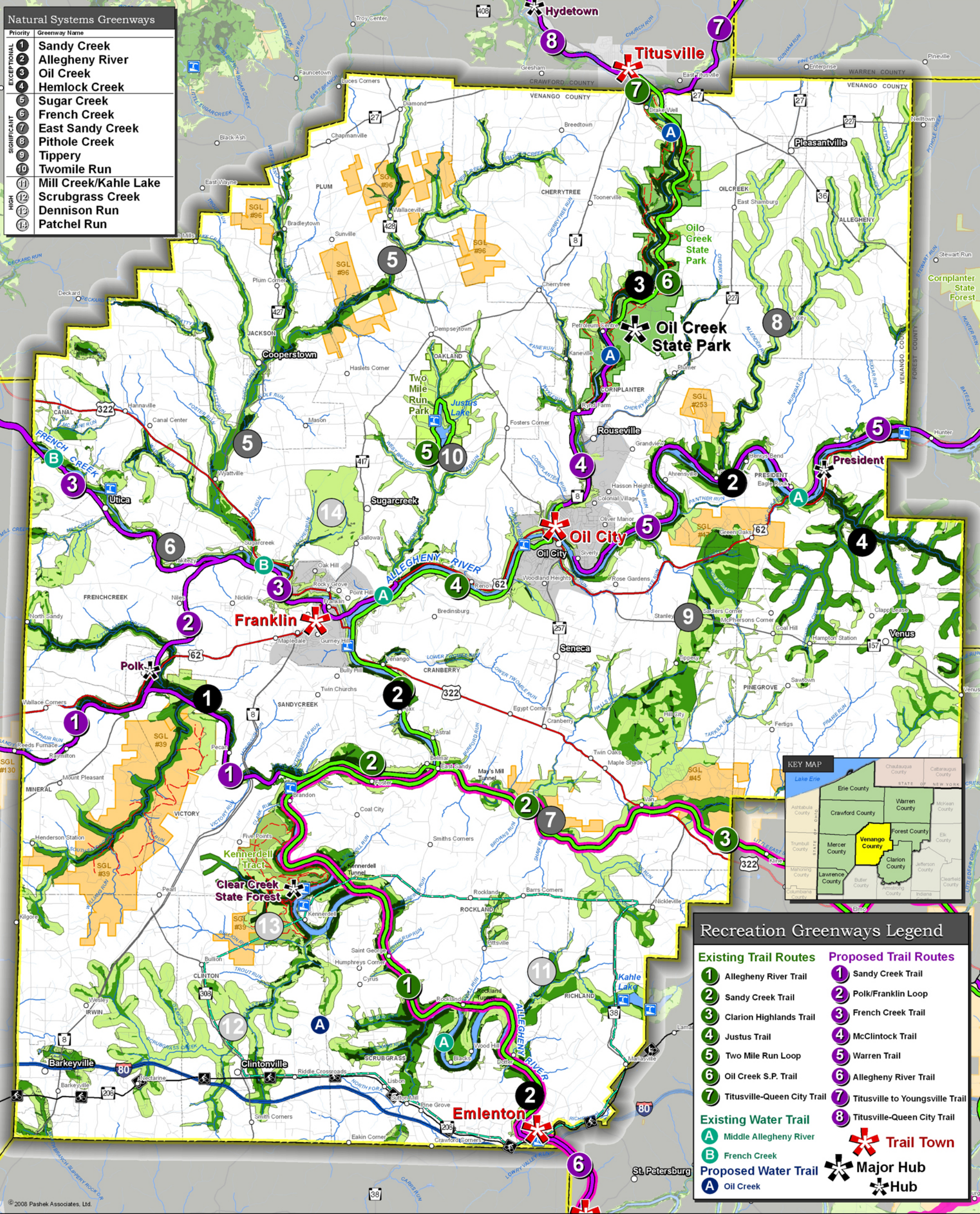
The timber industry is following in the footsteps of many other industries and looking at ways their profession can be carried out in an environmentally-friendly and sustainable manner. Local Forest Stewardship Council Certification is one such example. The Forest Stewardship Council (FSC) is an independent, nonprofit, non-governmental organization with diverse representation, including environmental institutions, timber and trade organizations, forestry professionals, indigenous peoples’ organizations, community forestry groups, and forest product certification organizations from 25 countries. The Council accredits certification bodies and promotes voluntary, third party certification. Certification is voluntary. The FSC logo on a product provides consumers with an assurance that the wood they use comes from forests managed in an environmentally- and socially-responsible manner.

The following organizations can be partners with Venango County in educating timber producers and land managers in managing their forests in an environmentally- and socially-responsible manner.

- Woodland Owners of Clarion – Allegheny Valley
- Pennsylvania Sustainable Forestry Initiative
- Pennsylvania Hardwood Development Council
- Allegheny Hardwood Utilization Group (AHUG)
- Wood and Lumber Industry Partnership

Northwest Pennsylvania Greenways Plan

Clarion County | Crawford County | Erie County | Forest County | Lawrence County | Mercer County | Venango County | Warren County



LEGEND

County Boundary

Municipal Boundary

Urban Areas

Lake / Reservoir

River

Interstate

PA State Route

US Highway

DCNR Managed Land

State Park

County & Local Parks

State Game Land

Pennsylvania State Forest

PA Fish & Boat Designated Water Trail

PA Canoeable Streams

Existing & Proposed Trails

Existing Trail

Potential Trail

Existing North Country Trail

State Forest, Park, Game Land Trails

Bicycle PA Route

Oil Country Trail

Proposed Shared-Use Path

Natural Systems Greenways Sensitivity Level

Exceptional

Significant

High

Data Source:

ESRI 2005 Street Map USA Data

US Geographic Survey (USGS)

Pennsylvania Spatial Data Access (PASDA)

Pennsylvania Department of Transportation (PennDOT)

Pashek Associates makes no claims to the accuracy of this data.

Projection: State Plane - NAD 1983

Pennsylvania North: Feet

2 0 2

Miles

PASHEK ASSOCIATES

a pennsylvania corporation

RECREATION AND TRANSPORTATION GREENWAYS

Existing and potential recreation and transportation greenway corridors were inventoried and analyzed. Through this process, existing recreation and transportation greenways were documented, and recommendations were developed for expanding those offerings and prioritizing their implementation.

Trail Prioritization Criteria

The steering committee established the following criteria by which each corridor was rated. The cumulative value of all criteria was utilized to determine the priority for a particular trail corridor. These criteria included:

1. *Trail Demand:* The degree of public support for the project and anticipated use of the trail. The greater the public support for a project and / or the greater the anticipated use of the trail, the higher the value.
 - a. Degree of public support is demonstrated by political support, public meetings, and through letters of support.
 - b. The projected use of the trail is a measurement of local use based on population in the vicinity of the proposed trail. The greater the projected use, the higher the value.
2. *Land Acquisition:* Trail concepts that require land acquisition to complete, receive a higher value because the project would not be feasible if land acquisition is not completed.
 - a. Donations / Low Cost: Significant Value
 - b. Associated with Regional Trail: High Value
 - c. Medium Cost: Medium Value
 - d. High Cost / Not Available: Valuable
3. *Connectivity:* The degree to which the trail connects to existing greenways or destination points or to on-road or pedestrian facilities. The greater the connectivity, the higher the value.
 - a. Regional Trail: Significant Value –a part of a regional trail system recognized by PA DCNR
 - b. Direct Extension: High Value - of existing trail and/or a spur directly into a destination center
 - c. Real Potential: Medium Value - to connect to existing opportunities
 - d. Stand Alone Trail: Valuable
4. *Environmental or Historical Impacts:* Measured by the degree to which the project will have anticipated, direct, adverse impacts to protected natural or historical resources. The greater the degree of impact, the lower the value.
5. *Benefits to the Public:* The total number of recreation, transportation, education, and other benefits that can be derived by the public from the project. The greater the number of benefits, the higher the value.
6. *Funding Opportunity / Partnering:* Considering the factors affecting the project's funding status and the degree to which the project may be allocated funds from a variety of agencies. The greater the funding opportunities, the higher the value.

7. *Economic Development Potential:* Trails that connect to proposed trail towns will have the greatest potential to impact the local economy.

Prioritization Levels

- *Exceptional Priority:* most significant priority, focus planning, acquisition, design and construction, and funding resources to implement project.
- *Significant Priority:* second most significant priority, focus planning, acquisition, design and construction resources to provide locals with opportunity to secure funding to implement project.
- *High Priority:* third most significant priority, focus planning, and acquisition resources to plan for future of project.

Land Based Trails

Existing and proposed recreation and transportation greenway corridor segments required to achieve the vision for Recreation and Transportation Greenways in Venango County and their corresponding priorities are as follows:

Exceptional Priority Recreation and Transportation Greenway Corridors

1) Allegheny River and Justus Trails

Allegheny River Trail: This existing shared use path, developed by the Allegheny Valley Trails Association, extends approximately twenty-eight miles on flat, smooth, eight-foot wide asphalt surface from Franklin to Emlenton, following the former Oil City Secondary Line. A dirt access road parallels portions of the trail and is suitable for horseback riding.

The Allegheny Valley Trails Association is currently in the process of securing the right for public access between Emlenton and Foxburg, in Clarion County. Once this access is secured, the Allegheny Valley Trails Association will begin securing funds and improving the trail. Currently, the three miles from Emlenton to Foxburg can be ridden on mountain bike, but it is unimproved.

Approximate Length: 28 miles.

Associated Municipalities: Richland, Rockland, and Cranberry Townships and the City of Franklin

Justus Trail: Extends for a distance of approximately six miles between Franklin and Oil City. This section of trail is constructed on the old Pennsylvania Railroad corridor which extended from Pittsburgh to Buffalo. It was developed by Cranberry Township and was extended by Oil City through town. The northern end of the trail is at the intersection of Seneca Street and State Route 8, while the southern terminus is at the Franklin Trailhead, where it connects to the Allegheny River Trail which extends to Emlenton.

The Justus Trail effort is being furthered by Cranberry Township and the Allegheny Valley Trails Association.

Approximate Length: It is approximately 6 miles in length.

Associated Municipalities: Cranberry Township, City of Franklin, and the City of Oil City

- 2) Oil Creek State Park Trail – This existing trail features a 9.7-mile asphalt path built on a historic railroad grade that runs parallel to Oil Creek between Petroleum Centre and downtown Titusville.

The southern section, between Petroleum Centre and Rynd Farm, is currently undeveloped. A feasibility study was completed for this segment in 2003. The Oil Region Alliance and the Allegheny Valley Trails Association are assisting Oil Creek State Park in developing implementation strategies for this trail segment based on the recommendations of the feasibility study.

Approximate Length: It is 9.7 miles existing, with 3 miles proposed.

Associated Municipalities: Cornplanter and Oilcreek Townships

- 3) McClintock Trail – The Oil Region Alliance of Business, Industry and Tourism (ORA) is assisting Cornplanter Township in extending the Justus Trail from its current ending point at the White Bridge in Oil City to the Rynd Farm in Oil Creek State Park Cornplanter Township. The first section of this trail will follow Waitz Road from McClintock Well No. 1, at the southern intersection with State Route 8, to the northern intersection with State Route 8 at Rynd Farm. The second phase of this trail, from White Bridge in Oil City to Waitz Road, is in the planning stage.

Approximate Length: It is approximately 4 miles in length.

Associated Municipalities: Cornplanter Township

Significant Priority Recreation and Transportation Greenway Corridors

- 4) Sandy Creek Trail – This trail's eastern section was completed in 2000, with eight miles of asphalt surface, seven pedestrian bridges, and a tunnel which was reconstructed in 2005. The eastern section is active from the Allegheny River into Clarion County.

In 2005, four additional miles of trail were added along the north/west bank of the Allegheny River to, and across, Sandy Creek. The remaining western section of the Sandy Creek Trail to Mercer County has yet to be completed.

This trail passes through State Game Lands No. 39 and 45, Belmar, East Sandy, and Van. It also connects to the Allegheny River Trail, and it is currently used as part of the temporary route of the North Country Trail.

The Sandy Creek Trail effort is being furthered by the Allegheny Valley Trails Association.

Approximate Length: There are approximately 12 miles completed and approximately 10 miles proposed.

Associated Municipalities: Cranberry, Sandycreek, Victory, and Rockland Townships

- 5) French Creek Trail – This proposed trail runs along French Creek from Franklin to Meadville, Crawford County partially along the former Oil City Branch of the New York Central Railroad

Venango County Greenways Plan

and also along the Franklin Secondary line. The Franklin Secondary line is currently active. If it should become available, efforts should be made to obtain the right-of-way for future trail use.

Approximate Length: There are 11.5 miles in Venango County.

Associated Municipalities: Frenchcreek and Canal Townships, as well as the City of Franklin, and Sugarcreek and Utica Boroughs

High Priority Recreation and Transportation Greenway Corridors

- 6) Polk/Franklin Loop – A shared use path following the former Oil City Branch of the New York Central Railroad corridor is proposed to connect the Sandy Creek and French Creek Trails, creating a loop between Franklin, Polk, and the Allegheny River.

Approximate Length: It is 4.7 miles in length.

Associated Municipalities: Frenchcreek Township and Polk Borough

- 7) Warren Trail – This proposed trail runs along the north bank of the Allegheny River from Oil City to the Forest County line on the former Oil City Secondary Line. The trail will connect the City of Oil City with the City of Warren and passes through President Township in Venango County along the way.

Approximate Length: There 16 miles in Venango County.

Associated Municipalities: Cornplanter, Cranberry, and President Townships as well as the City of Oil City

Other Recreation and Transportation Corridors

Clarion Highlands Trail – This sixteen and one half-mile trail follows part of the Jamestown, Franklin, and Clearfield Line from Venango County to the Clarion River at Piney Mine. Approximately three miles of this former rail bed is currently active within Venango County as the Clarion Highlands Trail.

This trail begins east of Van and passes through State Game Land No. 45. It is also currently used as a temporary route for the North Country Trail.

A portion of this trail, from just east of State Game Land No. 45, in Clarion County extending one mile east is in question due to questions of deed and ownership.

Approximate Length: There are 3 miles in Venango County.

Associated Municipalities: Rockland and Cranberry Townships

Twomile Run Loop – Twomile Run County Park features about twenty miles of trails suitable for mountain biking. The trails are mostly single track and challenging. A loop around Justus Lake is also planned.

Approximate Length: It is approximately 20 miles in length.

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Associated Municipalities: Sugarcreek Borough and Oakland Township

Existing and Proposed Safe Routes to Schools, Complete Streets, Bicycle Routes and Improvements

The Allegheny Valley Trail Association is actively working with the Valley Grove School District to develop a community trail around the Valley Grove Elementary School property, with the goal of connecting it to the proposed Polk Franklin Loop Trail, the Venango County 4-H Grounds, and to the City of Franklin. This trail provides an opportunity to demonstrate partnerships with the health community, the school district, French Creek Township, and the City of Franklin. Because of these partnerships, and the connections this trail can make, it is recommended that the efforts to establish this trail be supported.

The Venango County Planning Commission has proposed to explore the potential of a Complete Streets project in the vicinity of the Cranberry Mall, in Cranberry Township. Venango County provides VenanGO Bus Service to the Cranberry Mall and Home Depot complex which contains the local Social Security Administration Office, medical offices, retail stores, and restaurants. However, the complex is not pedestrian friendly and there are opportunities to increase pedestrian opportunities and to increase the opportunity to safely walk throughout the complex. Furthermore, the Cranberry School District and UPMC hospital facilities are located in close proximity to the mall, and opportunities exist for a pedestrian and bicycle connection between the entities. This project contains many elements of the Pennsylvania Department of Community and Economic Development's Keystone Principles and "Linking Land Use, Transportation, and Economic Development" program (LUTED) goals and would be a good candidate to serve as a LUTED demonstration project for the County. Therefore, it is recommended that efforts to further study and implement pedestrian and bicycle opportunities in this area be undertaken.

Bicycle PA Route V – runs from Ohio to New Jersey paralleling Interstate 80 almost the entire distance. This route enters Venango County on State Route 208 in Barkeyville heading east. The route follows State Route 208 passing through Clintonville before entering Emlenton in the southeast corner of the County. In Emlenton, Bike Route V crosses the Allegheny River on the Fifth Street Bridge. Traveling outside of Emlenton, State Route 208 heads north winding along the Clarion and Venango County lines and back into Venango County again before heading east through Clarion County.

It is recommended that PennDOT and members of the local bicycling community evaluate the existing designated PennDOT Bike Route with representatives of the Venango County cycling community to determine how the existing route may be improved.

It is recommended that the Oil Region Greenways and Open Space Coordinator work with local cyclists to prepare a Bicycle Suitability Map of Venango County. This requires existing bicycling opportunities to be evaluated to determine the respective cycling opportunity's level of comfort for the average bicyclist. Bike Pittsburgh, a bicycle advocacy group, recently completed this analysis and a corresponding map. The map documents those routes which are considered to be comfortable bicycling routes, those which are cautionary routes, and where existing bicycle lanes and shared use paths are present. The Centre Region Convention and Visitors Bureau has also done an outstanding job documenting bicycle routes in their region and can provide examples and advice on how a similar effort might be conducted in Venango County.

Oil City and Franklin should be applauded for their continued effort to address bicycle and pedestrian needs within and throughout cities. Oil City has officially designated bike routes through town. Franklin has an established safe routes to schools program and routes. It is recommended that similar efforts be undertaken in each of the trail towns proposed for Venango County.

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Associated Recreation and Transportation Corridors

Although not located in Venango County proper, the following existing and proposed trail segments are of regional significance and of significance to Venango County due to their association to the Oil Heritage Region:

Titusville - Queen City Trail – This trail extends for approximately 2 miles from the Jersey Bridge Parking Lot in Oil Creek State Park to Allen Street in Titusville.

Approximate Length: It is 2 miles in length.

Associated Municipalities: City of Titusville

Titusville to Youngsville Trail – This trail follows the former Valley Branch of the New York Central Railroad from Titusville to Youngsville in Warren County. The potential trail route, within Crawford County, extends northeast out of Titusville for about 3.6 miles before entering Forest County.

Approximate Length: There are 3.6 miles within Crawford County.

Associated Municipalities: Oil Creek Township and Titusville Borough

Utilizing an average cost range for rail trail construction of between \$50 and \$100 per lineal foot, the following table establishes a budget for the anticipated cost of constructing the rail trails described above. These costs are based on the following assumptions:

- Construction projects will be publicly bid projects following PA DCNR, PA Department of Labor Industry, and respective County / Municipal Code requirements
- Costs reflect the potential for completing projects with Pennsylvania Department of Transportation funding; from past experience it is known that this can increase the project costs by fifteen to twenty percent
- Property acquisition costs have not been incorporated into the projected costs
- Costs are based on 2008 construction figures; future year costs should be amortized by 4.5% per year for price escalation
- Costs do not include costs associated with major structures, >100' in length
- Cost projections should be confirmed / revised upon completion of preliminary design
- Costs do not assume in-kind, donated, or volunteer services

The projected costs may seem overwhelming at first. However, to fully understand the financial implications of implementing the projects, one must evaluate scenarios for implementation and funding to completely understand what the project will mean, and cost, to its implementation partners.

Implementation costs can be significantly reduced by utilizing in-kind and donated services, grants, foundation awards, and volunteer services. Each of these aspects can further reduce the cost to the implementation partners and reduce their requirement for a cash match. As an example, the Butler Freeport Trail Association, in Butler County, will be constructing 4.5 miles of rail trail on an acquired rail bed. Utilizing the multipliers identified herein, it is estimated the trail will cost between \$1,188,000 and \$1,820,000 to construct. However, through in-kind services being provided by a local municipality to construct the trail, and volunteer services clearing the corridor, they hope to reduce the costs to approximately \$400,000. This money will be used to purchase materials, and then volunteer and in-kind services will be used to provide the local match.

Trail	Unbuilt Mileage	Projected Construction Cost using \$50 / LF	Projected Construction Cost using \$100 / LF
Sandy Creek Trail	10.9	\$2,877,600	\$5,755,200
Polk/Franklin Loop	9.6	\$2,534,400	\$5,068,800
French Creek Trail	7.5	\$1,980,000	\$3,960,000
Oil Creek State Park Trail	3	\$792,000	\$1,584,000
McClintock Trail	4	\$1,056,000	\$2,112,000
Warren Trail	16.9	\$4,461,600	\$8,923,200
Allegheny River Trail	1	\$264,000	\$528,000

Personnel and financial resources for the implementation of each trail is not available to meet all of the needs simultaneously. Therefore, in order to focus and prioritize the resources required to implement the trail segments identified in this plan, the following criteria to prioritize the corridors was established. This criterion allows us to rank projects based on a common set criteria, established to ensure all resources are focused towards those projects with the greatest potential for public use, public benefit, and implementation.

Trail Implementation Strategies

Taking a trail from concept through implementation can be a daunting task to a trail volunteer who may be responsible for its implementation. Towards that end, the following is a step-by-step process that helps define the tasks required to advance the implementation of a trail:

1. Identify the potential corridor and any alternate routes.
2. Estimate the demand for the proposed trail. Will it connect local or regional population centers? Will the demographics of the area support the use of the trail?
3. Conduct research at the County Courthouse to gain an understanding of who owns the property.
 - a. If it is currently held by a railroad, contact the railroad to determine if it is likely to be abandoned in the near future – if currently owned by the railroad, then there is the potential to rail bank the corridor. Rail banking must in accordance with Pennsylvania Act 1990-188, the Rails to Trails Act.
 - b. If the property is owned by various individuals, it is likely the corridor has reverted back to private ownership. To confirm this title, research must be completed so a legal opinion to the ownership status can be rendered. If ownership is unclear, one must assume the property has reverted to the adjacent property owners until proven otherwise.
4. Document the benefits of the proposed trail, including: economic, transportation, recreation, health and wellness, establishing partnerships, and quality of life improvements.
5. Meet with municipal and county officials to discuss your proposal, review the potential alignment, and discuss the benefits the proposed trail can provide to the area.

6. Meet with property owners and the general public to solicit input and determine whether property owners support or oppose the proposed trail. For this initial meeting, it is important to listen and identify concerns, issues, and false understanding of what the trail will mean and how it may impact their property. With this information, you can tailor the concept for the trail to respond to the issues, concerns, and needs of the property owners. Also, by understanding any false pretenses they may have, you can prepare to respond to demonstrate what a trail is / will do, and what a trail isn't / won't do at a second meeting with the property owners. Ask for permission to go onto their property so you can get a better understanding of their concerns. Document this request in writing by having them complete a form at the public meeting.
7. Evaluate the corridor to determine the likelihood of physically establishing a trail on the corridor. Do not go onto the corridor without the permission of the current property owner(s) as you will be trespassing. For portions of the trail you do not have permission to access, utilize aerial photography and other geographic information resources to complete a thorough desktop analysis. Meet with willing property owners, as required, to allay fears and discuss particular concerns and alignments.
8. Prepare a concept plan for the trail to identify the trail's potential alignment, respond to land owner issues and concerns where possible, and develop an estimate of probable construction costs from this concept plan.
9. Develop management, operation, and security strategies for the continued operation of the trail. Many agencies will be leery of your proposal unless you can demonstrate that there is a long-term commitment and that long-term care can be provided for the proposed trail.
10. Complete a financial analysis to project the capital and operating costs for the proposed trail, and prepare a plan to show how those costs will be covered. Also, project the estimated economic impact of the proposed trail utilizing data collected from existing trails that are similar in nature to the trail being proposed.
11. Meet with the property owners and the general public a second time to present the proposed concept plan, and review the proposed recommendations for property acquisition; trail alignment; trail development; and trail management, operations, and security. Collect input of proposed recommendations, and determine where you have support and where you do not have support for the development of the proposed trail. Determine if logical portions of the trail can be advanced to demonstrate the impacts of the trail and to build support for extensions to the trail.
12. Based on the input received, determine whether there is a feasible demonstration project that can be implemented.
13. Secure rights for public access to the demonstration segment of the proposed trail.
14. Complete final design, prepare construction documents, and obtain required permits for the construction of the proposed demonstration segment.

Recognizing several of the proposed trail routes in Venango County should begin with the completion of a trail feasibility study for their respective corridors. The following table provides an estimate of the costs associated with completing those studies. The costs shown are based on the consultant's experience in completing similar projects in other areas of the state. The budgets proposed here are based on 2008 dollars and should be increased by 4.5% for each year beyond 2008.

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Trail Corridor	Unbuilt Mileage	Feasibility Study Cost				Priority
		Title	Legal	Feasibility	Total	
Allegheny River Trail	1	Not Required			\$0	Exceptional
McClintock Trail	7.1	Not Required			\$0	
French Creek Trail	7.5	\$6,250	\$2,500	\$60,000	\$68,750	Significant
Sandy Creek Trail	10.9	\$9,083	\$3,633	\$40,000	\$52,717	
Polk / Franklin Loop	9.6	\$8,000	\$3,200	\$40,000	\$51,200	High
Warren Trail	10.2	\$8,500	\$3,400	\$40,000	\$51,900	

These costs may be reduced if there is a well-organized trail constituency group. That group may be able to complete title research and develop the management, operation, and security components of the feasibility study, thereby reducing the overall cost of the plan. Furthermore, the value of their in-kind services can potentially be used to fulfill a portion of the local match requirement when required by grant funding sources.

This step is of the utmost importance. The number one issue facing local trail organizations is that most do not have the capacity to do the work required to determine a particular corridor's viability. Providing these organizations with a completed feasibility study will go a long way towards giving them the information and direction required to move their plan forward. Furthermore, a significant component, both from a cost perspective, and from a needs perspective, is that of completing the legal feasibility portion of the studies. This component includes completing title research and receiving a legal opinion regarding the ownership status of the corridor in question. Without this information local trail organizations are not able to move forward with their work.

Erie to Pittsburgh Greenway

As the Northwest Pennsylvania greenways planning process was beginning, the "Erie to Pittsburgh – A Vision for Developing a Trail Network" process was concluding. The Erie to Pittsburgh visioning study was completed by the Rails to Trail Conservancy's Northeast Regional Office. The purpose of the visioning process was to:

- Develop a strategy to create a major north-south spine trail from Erie to Pittsburgh
- Connect two of Pennsylvania's major population centers
- Catalyze and coordinate trail development efforts
- Re-focus single trail development efforts to be part of this larger whole
- Assist local stakeholders in coming up with their vision
- Help to assure that every inch of the network has a local partner actively pursuing its completion

As a result of this visioning process, the Western Pennsylvania Potential Trail Network was identified as shown on the map on the following page.

This visioning process identified several opportunities to achieve the goal of connecting the Erie Region with Pittsburgh. These are described as follows:

Segment A

One opportunity exists in the eastern portion of the study area. Existing trail segments of the Allegheny River Trail, Oil Region Trails, East Branch Trail, and Corry Junction Rail Trail can be connected by completing the gaps to connect Lake Erie, just north of Findley Lake in New York, to Pittsburgh. From the Lake Erie Shore in New York, a shared road bike ride approximately forty-five miles in length provides connectivity to Presque Isle State Park and the City of Erie.

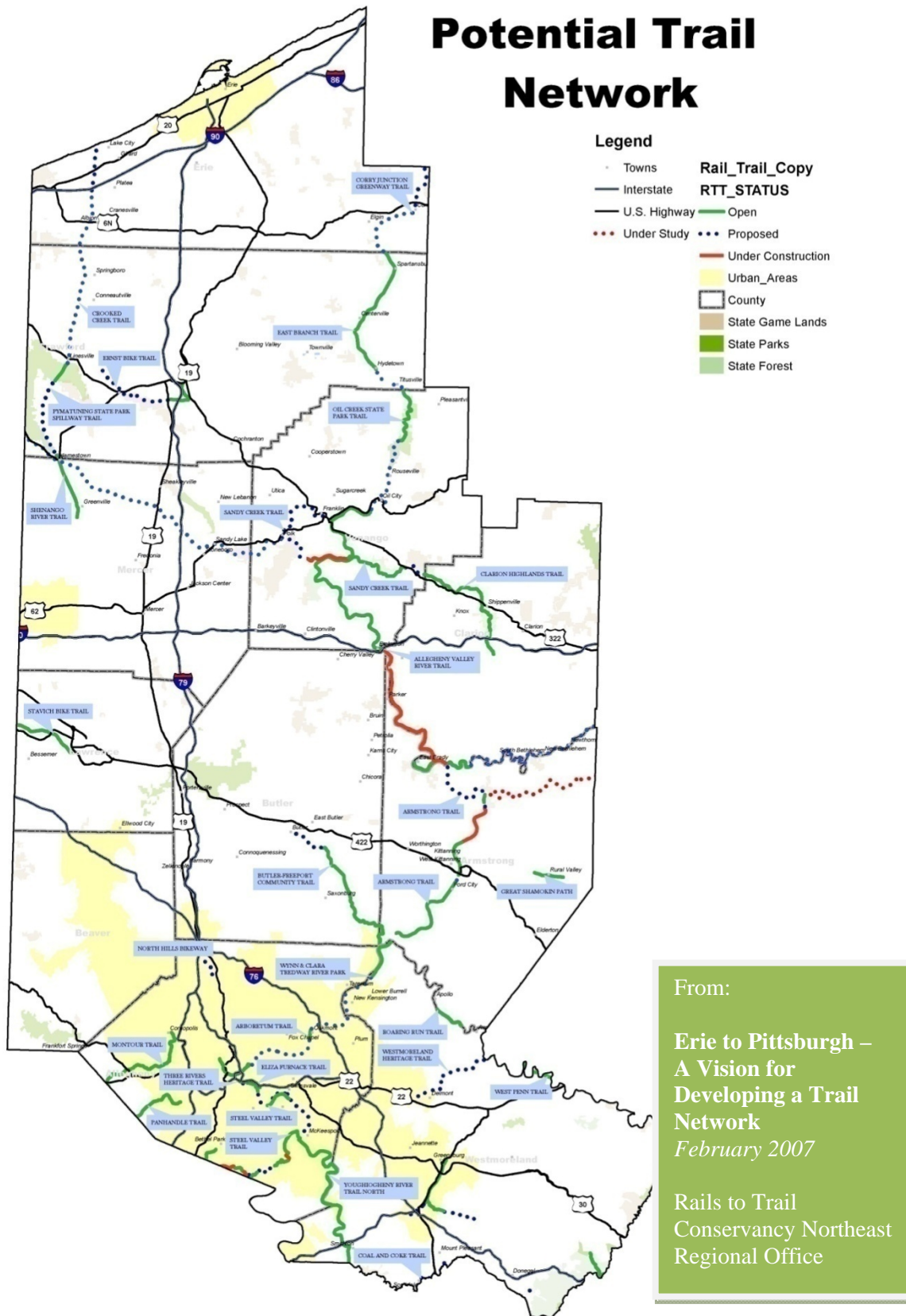
Segment B

This proposed corridor would also utilize the southern portions of Segment A. However, it would divert from the Segment A alignment at Franklin and follow the former Erie Railroad corridor through the French Creek Valley, following the former Franklin Branch of the Erie Railroad to Cochranton and continue northwest along the corridor to join the existing Ernst Trail in the Meadville area. From this point, the proposed trail would follow the former Conneaut and Linesville Branch of the Bessemer and Lake Erie Railroad to Conneaut Lake Borough and continue westward along this corridor to Linesville. At Linesville, the proposed trail would head north, following the former Pennsylvania Railroad and Beaver and Erie Canal corridor through Springboro and into Erie County. The proposed trail would continue northward in Erie County passing through Albion and into Girard where it would terminate near Erie Bluffs State Park. From here there is potential to connect the proposed trail to the existing Seaway Trail to reach the City of Erie and Presque Isle State Park.

With the Northwest Greenway Plan underway, opportunities identified in the Western Pennsylvania Potential Trail Network developed, by the Rails to Trails Conservancy, were also evaluated.

Based on this evaluation of these opportunities consensus was reached with their findings regarding prospective segments that can potentially connect Erie to Pittsburgh. In addition, another possibility exists.

Western Pennsylvania Potential Trail Network



Segment C

As with Segment B, this proposed corridor would also utilize the southern portions of Segment A. However, at the village of East Sandy, the proposed trail would leave the Segment A alignment and follow the existing Sandy Creek Trail west. At the terminus of the existing Sandy Creek Trail, the proposed trail continues west, following the former Clearfield Branch of the New York Central Railroad, to the vicinity of Polk where it would connect to the former Oil City Branch of the New York Central Railroad corridor and continue west into Mercer County, passing through Sandy Lake Borough. The proposed trail would continue northwest, following the Little Shenango River along the former Oil City Branch of the New York Central Railroad corridor to Jamestown Borough. In Jamestown, the proposed trail would continue north, along the former Pennsylvania Railroad and Beaver and Erie Canal corridor, which is described in Segment B.

From a regional perspective, all of the proposed segments provide significant opportunities:

- ✓ It is desirable on a national level to have a continuous trail from Washington, D.C. to Albany, New York, with connections to Cleveland, OH and Buffalo, NY.
- ✓ Large portions of the eastern route, Segment A, are established in the form of the Allegheny River Trail, the Oil Region Trails, the East Branch Trail, and the Corry Junction Rail Trail.

Furthermore, this corridor passes through several population centers including Franklin, Oil City, Titusville, and Corry. This is important for two reasons. First, the trail can capitalize on the latent demand for trail use that is present among the area's population. Second, these main street communities have an opportunity to market themselves as Trail Towns and capitalize on economic development opportunities that come with that designation.

- ✓ The western routes, Segments B & C, also pass through several population centers, at a smaller scale than Segment A, which can capitalize from Trail Town status. More importantly, these segments provide an opportunity to connect the two most visited state parks in the Commonwealth to one another and to the Erie to Pittsburgh Trail. These two parks generate more than one million additional visitors on an annual basis than does the third most visited state park in the Commonwealth, Point State Park in Pittsburgh.

Furthermore, these segments can also connect the undeveloped Erie Bluff State Park to the two existing state parks. The fact these state parks attract visitors to the region who desire outdoor recreation experiences, makes these corridors highly desirable. The proposed development of a trail connecting these resources would encourage increased visitation and length of stays in the Northwest Pennsylvania region.

Last, a western corridor has the opportunity to be extended further to the south, to provide access to the Erie to Pittsburgh Trail, from the population of the Shenango Valley or Mercer County and potentially further south along the Neshannock Creek corridor to the vicinity of New Castle, Lawrence County. This would further expand the population base that would have access to the proposed Erie to Pittsburgh Trail; tie into efforts of establishing the Shenango River Trail; and connect another popular recreation destination, the Shenango Reservoir, to other opportunities identified herein.

- ✓ A loop network, utilizing the Seaway Trail to connect eastern and western routes, would enhance the opportunity to capitalize on the trail's economic impact to the Northwest Pennsylvania region by making it desirable for visitors to spend more time and make more trips to the region.
- ✓ Population centers generate trail users; trail users spend money along the trail corridors; money spent along the corridors equals economic development; and therefore, more trail users mean more money will be spent in the region.
- ✓ An expanded vision for the Erie to Pittsburgh Trail will provide greater visibility and generate more interest with potential funders.

From a regional perspective, it is our opinion the Erie to Pittsburgh Trail will be most successful if it can incorporate a connection to and between Pymatuning State Park, Presque Isle State Park, Erie Bluff State Park, and the Erie Bayfront. Furthermore, there is also tremendous appeal and desire to continue the trail from the Lake Erie shore in New York northeast through Buffalo, New York and eventually on to Albany.

Just as the Great Allegheny Passage has a fifty-two mile branch from McKeesport to the Pittsburgh International Airport, by virtue of the Montour Trail, the vision for the Erie to Pittsburgh Trail should contain a western route, by connecting resources of state-wide significance located in western Pennsylvania.

Erie to Pittsburgh Trail Alliance

Upon completing the Erie to Pittsburgh Trail visioning study, the process of developing an Erie to Pittsburgh Trail Alliance was begun by those who represent the various trail organizations, County representatives, and representatives of economic development agencies, who are located along the proposed routes for the Erie to Pittsburgh Trail.

The Alliance resulted from a desire of the various stakeholders involved with the visioning process to continue to implement their vision for the Erie to Pittsburgh Trail by assisting one another in planning for and developing their respective trail segments. The Alliance consists of the following agencies:

- Armstrong Rails-to-Trails Association
- Allegheny Valley Trails Association
- Clear Lake Authority
- Cochran Area Greenways
- Chautauqua Rails to Trails Association
- Envision Linesville, Inc.
- Erie – Western Pennsylvania Port Authority
- Friends of the Riverfront
- Mercer County Trails Association, Inc (Jamestown-Franklin Trail)
- Northwest Pennsylvania Regional Planning & Development Commission
- Northwest Pennsylvania Trails Association
- Oil Region Alliance of Business, Industry, and Tourism
- Titusville Area Trails Association

At their June 23, 2008 meeting, the Alliance adopted the following mission statement:

Erie to Pittsburgh Trail Alliance Mission Statement

Erie to Pittsburgh Trail Alliance is an active coalition of trail organizations and individuals dedicated to the promotion, acquisition, development, and maintenance of a safe non-motorized trails network that connects the “Point” in Pittsburgh to the “Bayfront” in Erie. Erie to Pittsburgh Trail Alliance will seek to improve the quality of life for communities along the trail network while stimulating economic development and recreational tourism activities.

Also at this meeting, two maps were presented to discuss the various alignments listed in the visioning study and to establish a focus and priority.

Map One: This option presented the single linear route from Pittsburgh north to the Franklin area, with three branches/forks to Erie:

- a. At Belmar, 5 miles south of Franklin, follow a “western route” on the old NYC railbed to Jamestown, PA, then north on the old PRR line to Albion, Girard, and the Seaway Trail to Erie.
- b. At Franklin, branch west on a proposed French Creek Trail to Meadville then by various routes to Erie.
- c. At Franklin, continue on the old PRR line to Oil City, Titusville, Spartansburg, Corry, Clymer, Chautauqua, Brockton to the Seaway Trail then west to Erie.

Map Two: This option, referred to by the Alliance as the “eastern route”, follows the single linear route from Pittsburgh to Franklin, as in option 1), then follows the same route as branch c. above, north to Chautauqua and the Seaway Trail at Brocton, NY then west to Erie.

Members of the Alliance made a motion which was passed for the “Eastern Trail” to be the priority and primary route for the Erie to Pittsburgh Trail.

WATER TRAILS

Guidelines for PA Fish & Boat Commission designation as presented in the Commission's Fact Sheet, as follows:

- ✓ **Public Planning Process:** In order to designate a water trail, there must be a public process. This includes multiple public meetings that are publicly advertised. The purpose of the meetings is to collect information about the water trail (access points, amenities, etc.) and to gain support for the water trail. A steering committee is also recommended, which is made up of targeted stakeholders.
- ✓ **PFBC Water Trail Logo:** All designated water trails must use the water trail logo as developed by the PFBC. The top portion of the logo is a standard Pennsylvania Water Trail image. Local groups can customize the bottom portion of the logo within the bordered format.
- ✓ **Mapping and Signage:** Any maps provided in partnership with the PFBC, as part of the PFBC technical assistance, must be distributed at no cost. Key access points should have trailhead signs. Other signage like interpretive signage and trail markers are desirable.
- ✓ **Local Government Notification:** As part of the public process, it is highly recommended that water trail organizers work with the local governments that are traversed by the trail. The purpose is both to notify and involve them in the development of the water trail-local support. Water trails benefit local governments so it is only logical that they should be involved. Also, if the local government is not involved at the outset of the project there may be unforeseen conflicts as the trail goes into development.
- ✓ **Access Points:** For ease of use, water trails should have at least one access point every ten miles. These points must be able to accommodate boats appropriate for the water trail.
- ✓ **Management & Stewardship Commitment:** There must be a local group who is willing to sign a Water Trail Partnership Agreement with the PFBC. The agreement is for a length of five years and includes specific agreements about signage, mapping, roles of the local group and the PFBC, stewardship goals, etc.
- ✓ **Safety Information:** Managers of water trails have a responsibility to provide safety information and to warn of hazards. No waterway is completely safe. However, by providing pertinent information about the waterway and good safety tips, hazardous conditions can be addressed appropriately. For example, users may be asked to portage around a particularly hazardous area.

In her thesis completed in 2002, "Case Studies of Water Trail Impacts on Rural Communities", Lindsay Johnson, MCRP provides the following recommendation for developing a successful water trail.

Rural communities interested in water trail development should be aware of impacts on local culture, the environment and businesses. Negative impacts can be mitigated if the community is supportive of water trail development and there is dedicated management. The following recommendations should help project leaders plan, organize, and create facilities for water trails, while minimizing impacts on rural communities.

Planning and Organizational Needs

1. A shared vision for a water trail is a goal that community members believe in and are willing to work towards. Dedicated local support for a goal-oriented project will sustain local water trail benefits. A dedicated group of volunteers is key to water trail success. A water trail must be advocated and maintained locally if the community will reap economic and social benefits.
2. Address landowner and citizen concerns through outreach to the community early in the project. A designated contact person should respond quickly and accurately to suggestions, concerns, and other comments. A pre-opening/pre-construction trail paddle will allow community members to see the proposed blueway for themselves.
3. Solidify funding, planning, and overall water trail management with clear leadership and goals. These factors should be considered before marketing a water trail.
4. Investigate local goals, norms, and land use patterns that are inconsistent with the water trail vision or threaten the integrity of a paddling experience. Tourism development in rural areas will have social implications, including increased land values.
5. Explore partnership opportunities and apply for grants and offers of assistance. Local officials, government agencies, businesses, and the community should commit to water trail project goals. Successful water trails are the result of a cooperative effort between an active citizen group, a responsive public agency, and a supportive community, all of whom share a vision for the trail. Partner with lodging, eating and drinking, retail sales, and recreational services businesses.
6. Host events to advertise the trail, build support, and draw new volunteers. Noteworthy events, such as water trail grand openings and annual paddling festivals provide an excellent opportunity to make contact with the community. Present accurate information and generate positive media attention.

Infrastructure Needs

7. Designate and clearly sign legal access points and public land at reasonable intervals to minimize landowner concerns.
8. Promote 'leave no trace' ethics or provide adequately-maintained facilities to mitigate for environmental impacts from improperly disposed human waste, large groups, and littering.
9. Improve access to parking at river put-ins. Information and access are two big issues to improve trail system usage. Additionally, as traffic increases on the waterways additional access points and signage to identify locations are needed to provide emergency access opportunities.
10. Manage a river experience. The quality of the natural environment and uncrowded river conditions are important to paddlers. These aspects of the river experience are vital for all management actions.
11. Explore the history of the waterway and interpret these stories to paddlers in creative ways. Trail users often have an interest in the history and environment of the community and can help to support museums, nature centers, and other cultural assets. The interpretation of history and linkages with the past is a marketable concept.

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12. Offer a variety of accessible activities. Paddlers are often interested in easy access to downtown, restaurants, campgrounds, and bed and breakfasts in other outdoor recreation experiences and learning about local history and culture. Successful paddle destinations offer diverse activities with a wide variety of opportunities. Overnight trips are key.

To date, there has not been a study completed to document the economic impacts of a water trail on the communities along its path. Therefore, it is recommended such a study be completed along the Allegheny River, utilizing the format established by the Rails to Trails Conservancy in their “Trail Users Survey Workbook”. Furthermore, data be should be collected from canoe and kayak liveries and known providers of goods and services within the corridor to assist in providing the most accurate estimate of economic impact that can be achieved. The results of this study can then be utilized to promote the establishment of other water trails throughout the Commonwealth. Like the surveys completed for rail trails, it is suspected that the economic impact of water trails are far greater than realized by the County and local decision makers in Venango County.

Local partners should be identified to explore the potential of establishing, maintaining, and promoting designated water trails along the following corridors in Venango County:

French Creek – 74 miles

Although not officially recognized by the Pennsylvania Fish and Boat Commission as a water trail, French Creek has functioned as a transportation corridor throughout history, including George Washington’s 1753 campaign.

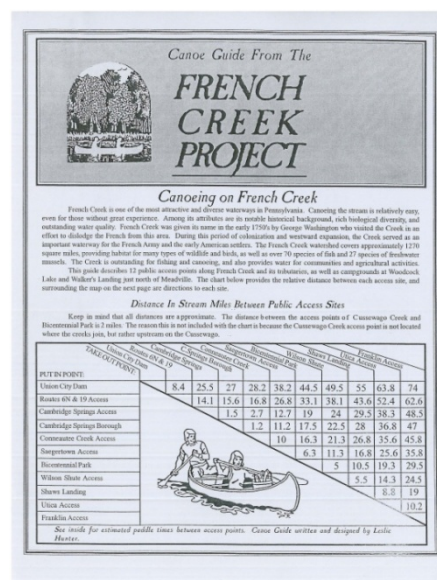
A “Canoe Guide from the French Creek Project” was published in the mid 1990’s. The French Creek Project was initiated in May of 1995 by: the Pennsylvania Environmental Council, the Western Pennsylvania Conservancy, The Nature Conservancy, and Allegheny College.

This canoe guide documents canoeing opportunities associated with French Creek from Union City Dam in Erie County to its confluence with the Allegheny River at the City of Franklin in Venango County, covering a distance of seventy-four miles. Over this length of seventy-four miles French Creek winds its way through the towns of Edinboro, Cambridge Springs, Saegertown, Meadville, Cochranton, and Franklin.

The guide identifies twelve Shuttle points along this route’s length. They are located at:

Mile 0.0.....Union City Dam
Mile 8.4.....Routes 6N and 19
Mile 25.5.....Cambridge Springs
Mile 27.0.....Cambridge Springs Borough
Mile 28.2.....Conneauttee Creek
Mile 38.2.....Saegertown Access
Mile 44.5.....Bicentennial Park
Mile 49.5.....Wilson Schute
Mile 55.0.....Shaw’s Landing
Mile 63.8.....Utica Access
Mile 74.....Franklin Access

At this point the French Creek joins the Allegheny River Water Trail.



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Conversations held during this planning process indicate two canoe liveries were present along the creek, but both have closed in recent years.

The “Canoeing Guide to Western Pennsylvania and Northern Western Virginia”, published in 1991 by Weil and Shaw, documents the following canoeable streams in Venango County. The following canoeing opportunities are documented in this resource. Access points are noted in the guide as put in and take out locations. The ownership status of these locations is unknown.

Oil Creek

Centerville to Titusville – 12.0 miles

This section of Oil Creek should only be run at higher than average spring water levels.

Shuttle Points:

- Unknown

Titusville to Rouseville – 12.0 miles

Old logging dam about 3 miles below Drake Well Museum, run center, difficult in medium or low water, 1.5 foot drop. Ice breakers present below location of State Park Office, use portage trail on left side. Bank cut at portage trail access is small; time canoes accordingly. Alternatively, take out on right of structure and portage around.

Shuttle Points:

- Drake Well Museum near bike trail access, or at State Route 27 Bridge west of Titusville/ State Route 8 Rynd Farm Bridge, or 0.5 miles upstream at picnic area
- Alternative, trail access at Petroleum Centre

Middle Allegheny River Water Trail

The Middle Allegheny River Water Trail, beginning in Warren County below the Kinzua Dam, extends one hundred and seven miles downstream to the Emlenton Access in Venango County. This is one of two official water trails in the Northwest Pennsylvania Planning and Development Commission region. The second is the Clarion River Water Trail. The Middle Allegheny River Water Trail has been officially sanctioned by the Pennsylvania Fish and Boat Commission through their water trails program.

In their “Middle Allegheny River Water Trail Guide,” the Pennsylvania Fish and Boat Commission describes the Shuttle points and opportunities along the southern segment of the Middle Allegheny River Water Trail. A description of the northern section, which extends into Forest and Warren Counties, can be found in the Warren and Forest County Greenway Plan inventories. Printed copies of the guide, which also contain a map and boating safety information, are available from the Pennsylvania Fish and Boat Commission.

Oil Heritage (Southern) Segment - Tionesta to Emlenton - 62 Miles

This segment of the trail is rich in history associated with the oil and lumber booms and settlement along the river. Remnants of the iron, oil, and railroad industries are visible along the way. This trail segment contains four public islands owned by Venango County, in addition to 64 islands under other ownership.

The public islands are open for camping and recreation. Access is available, but more limited compared to the northern segment upriver from Tionesta.

Shuttle Points:

- Tionesta Fish Culture Station
- Tionesta Borough
- Tionesta Access
- President
- Oil City:
 - Oil City Rapids: The Oil City Rapids, considered class II rapids, are the most technical/difficult section of the river trail. This section is located just below the Veterans Bridge at the Arlington Hotel, where Oil Creek enters the Allegheny River in Oil City. Novice or inexperienced canoeists should portage around this area around the shallower river bank. Experienced canoeists should wear their life jackets if they attempt to canoe these rapids.
- Oil City Access
- Samuel Justus Recreational Trail
- Franklin
- Allegheny River Trail/Cranberry Township Hike/Bike Trailhead
- Cranberry Township Primitive Camping/Lower Two-Mile Run
- Belmar Bridge
- Fisherman's Cove
- Danner's Rest / Clear Creek State Forest, Kennerdale Tract
- Kennerdell
- Kennerdell Tunnel
- Rockland Furnace
- Emlenton

TRAIL TOWN OPPORTUNITIES

It should be the goal of Venango County's recreation and transportation greenways to attract every trail user to the main street districts, where they can find the goods and services they need, while spending money in our towns. Therefore, it is recommended the Oil Region Greenways and Open Space Coordinator, with support from the Venango County Regional Planning Commission, educate and coordinate the planning and development of trail towns with applicable municipalities. Several Venango County municipalities are ideally situated to capitalize on a trail town concept to maximize the economic benefits that can come with trail development.

In 2005, the Allegheny Trail Alliance published "Trail Towns – Capturing Trail Based Tourism, a Guide for Pennsylvania Communities". The development of this guide was funded by the Regional Trail Alliance and the Pennsylvania Department of Conservation and Natural Resources. The guide provides step by step guidance in preparing a blueprint to provide goods and services required by trail users and promoting trail-friendly towns.

Trail Towns

- Entice trail users to get off the trail and into your town
- Welcome trail users to your town by making information about the community readily available at the trail
- Make a strong and safe connection between your town and the trail

- Educate local businesses on the economic benefits of meeting the needs of trail tourists
- Recruit new businesses or expand existing ones to fill gaps in the goods or services that trail users need
- Promote the “trail-friendly” character of the town
- Work with neighboring communities to promote the entire trail corridor as a tourist destination

Towards that end, the following communities have been identified as potential Trail Towns because of their proximity to existing or proposed trail corridors, have established main street districts and provide food, lodging, fuel, and basic services desired by trail users.

Potential Trail Towns

- Emlenton
- Franklin
- Oil City

Trail Towns provide goods and services desired by trail users. These goods and services may include bicycle sales and service, casual restaurants, bed and breakfasts, ice cream shops, convenience stores, restrooms, outfitters, museums, art galleries, gift shops, clothing stores, camera stores, postal services, banking services, and guide services, to name a few. It is important that goods and services can be procured in trail-friendly environments, meaning that they encourage, not discourage, clientele that may have just come off the trail. Provide ample opportunities to secure their bicycles in bike-friendly bike racks. Provide a shoe brush outside your doorway to allow them to clean the mud off their shoes before entering your establishment. Provide a restroom with ample space and necessities, such as towels and wash clothes, to allow them to clean-up so they can feel comfortable while at your location. Finally, sell items that trail users need while out on the trail or as mementos of their visit.

Creating a Trail Town involves organizing, educating, promoting, and economic restructuring. It results in the preparation of a Trail Town Master Plan that pulls it all together by providing a gateway moment, creating a sense of place, developing a welcoming atmosphere, establishing the right mix of services, and promoting trail-oriented events.

This process should be lead by the local Chambers of Commerce and /or Merchants Associations, in cooperation with their respective municipalities. The development of Trail Towns will require new partnerships to be developed by stakeholders in each community. Developing a trail town master plan will require monthly meetings of the stakeholders and should involve quarterly meetings of trail town catalysts to prepare a coordinated approach.

As a first step, each community must understand their customers. What do trail users want when they come to town; what do they need; does someone in town have the ability to meet that need? How much money will they spend; what are their dining and shopping preferences; how many trips do they make during the course of the year; etc.?

Next, complete an inventory of the community and its business community to determine if there is the ability to meet the needs of the trail users, or if the community needs to encourage the development of a business to meet an unmet need. With this information, a community can develop a trail town marketing guide, which can be provided to trail users. This guide should accomplish several tasks. First, it should provide the trail user with information regarding the trail, provide maps of the trail segments, and locate those who offer the goods and services that the trail users desire. The guide should focus on the qualities of your community that make it unique. It can provide an overview of the history of the community and a

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history of features located along and adjacent to the trail corridor. Further, advertising space can be sold in the guide to those who offer goods and services of interest to trail users.

Upon completing the self assessment recommended in the Trail Town guide, a community will be able to identify those businesses that cater to trail users. Then, a wayfinding signage program can be developed to assist trail users in finding the goods and services they need and to allow those in the community to find the trail and trail access opportunities. At this time, the community should also be aware of the goods and services that are desired but not being provided in the community. With this information, community development efforts can focus on attracting and expanding businesses that can fill those voids. For further details in preparing a detailed trail town master plan, refer to “Trail Towns – Capturing Trail Based Tourism, a Guide for Pennsylvania Communities,” published by the Allegheny Trail Alliance.

Potential Trail Town Advocates

The following agencies should be approached to determine their interest in implementing and promoting their respective communities as trail towns in Venango County:

Agency	Address	Telephone
Oil Region Alliance of Business, Industry, and Tourism	206 Seneca St 4th Floor P.O. Box 128 Oil City, PA 16301-0128	814-677-3152
Franklin Area Chamber of Commerce	1259 Liberty Street Franklin, PA 16323	814-432-5823
Franklin Industrial and Commerical Development Authority	191 Howard Street Franklin, PA 16323	814-432-4476
Venango Area Chamber of Commerce	41 Main Street P.O. Box 376 Oil City, PA 16301	814-676-8521

IMPLEMENTATION TOOLS

Proposed natural, recreation and transportation greenway corridors will pass through public land, such as national and state forests, state game lands, and other public lands. In these areas, the corridors are generally conserved for the intended use. However, many natural, recreation and transportation greenway corridors will pass through privately owned land. Few municipalities in Venango County have basic provisions to promote the conservation of the natural system resources.

Therefore it is recommended that the Venango County Regional Planning Commission work with local municipalities and their elected officials to be proactive in conserving natural systems greenways corridors by encouraging the conservation of riparian buffers (streamside setbacks), steep slope margins, interior forest habitat, woodlands, seasonal high water table soils, heritage trees, and habitat of rare, threatened, or endangered species.

Land use tools can be adopted and are highly recommended to protect the health, safety, and welfare of Venango County residents to reduce flooding and other stormwater management problems currently being experienced by the County's municipalities; to reduce the costs of providing public services to maintain and operate the County's and municipalities' infrastructure; and to achieve the vision for retaining Venango County's rural character.

With the majority of Venango County's municipalities covered by the Venango County Subdivision and Land Development Ordinance, it is recommended an audit be conducted of the County's ordinance to determine how they can be strengthened. This audit will accomplish the recommendations contained herein for the conservation of natural systems greenway corridors and implementation of recreation and transportation greenways.

Furthermore, it is recommended that the County begin a process of educating elected officials and residents of municipalities who have not completed and adopted a Comprehensive Plan or Zoning Ordinance. The educational process must focus on the benefits provided by good planning and the downfalls associated with poor planning or reactive planning efforts.

It is recommended that these educational efforts be conducted based on the priorities established for the natural system greenway corridors. Therefore, the educational process should begin in those municipalities with Exceptional Priority natural system greenway corridors.

As the educational process progresses, and municipalities become comfortable with the concepts, then it is recommended the County work with the municipalities to encourage the completion of comprehensive plans and to have them consider adopting the County Subdivision and Land Development Ordinance, and either a proposed county-wide or local municipal zoning ordinance.

WHY PLAN?

Many communities choose not to plan for their future. Rather, their community's future is planned for them by those developers whose goal is their own financial best interest and not necessarily the best interest of the community. Every community has resources, features, and qualities about their community that they would like to retain. Without pro-active planning, it is nearly impossible to retain those features. Planning for a community begins with asking, how do you want to improve your municipality?

Lack of pro-active planning efforts creates costs for the community and their residents:

On Quality of Life

- Failing and abandoned businesses reflect poorly on community image
- Poor design impacts aesthetics and community pride
- Isolation for older and younger residents, due to the need to rely on the automobile to access goods and services
- Lack of access to open spaces and places to recreate

On Rural Lands and Natural Resources

- Loss of wildlife habitat and pollution of aquatic resources diminish biodiversity and recreational hunting and fishing opportunities
- Removal of vegetation increases stormwater runoff and causes flooding, creating a public safety concern
- Removal of vegetation results in increased air pollution

On Transportation

- Limits choices – no alternatives to the automobile
- Increases transportation costs – more miles traveled

On Redevelopment / Development

- Incompatible adjacent land uses
- Increased redevelopment / development costs
- Overgrading leads to unstable slopes which create a public safety concern
- Impervious surfaces increase runoff, stormwater flow, and flooding; creating a public safety concern
- Stream water quality can be degraded by erosion

By proactively planning for our community's future we can:

- ✓ Retain and attract people and jobs
- ✓ Keep existing cities and towns vital
- ✓ Enhance natural resources and quality of life amenities
- ✓ Conserve tax dollars

Successful communities have the following characteristics:

- A pro-active, action-oriented mindset and a strong private-public partnership
- A diverse community leadership system with extensive citizen involvement
- A strong implementation plan with specific benchmarks and measurements of success

Traditionally, land use tools, such as comprehensive planning, zoning, and land development and subdivision ordinances have been used to guide a community in achieving its vision for the future. However, in many areas of Pennsylvania, zoning is a contentious word, setting off concerns of taking away property rights and one's ability to do as they wish with their land.

However, municipal leaders must recognize that local government is the backbone of Pennsylvania's governmental structure, and local government has the responsibility to plan and take charge rather than doing nothing. To do nothing puts planning in the hands of others who may not care about the future of our community. Good planning, and the implementation of land use tools that often follow, are not designed to take away property rights from the property owner, but rather are designed to guide the community in achieving its vision for the future. Good planning cannot occur in a vacuum. It must include residents of the community and be a pro-active effort which thoughtfully considers all aspects of each issue and builds consensus on the vision being established for the community's future.

Keystone Principles

In 2005, Governor Rendell's Economic Development Cabinet announced a set of principles and criteria to be used by state agencies to guide investment and support local growth and economic development. These principles are referred to as the "Keystone Principles".

These principles set the focus for continuing efforts to encourage economic development that sustains and grows economies in urban, suburban, and rural areas, while at the same time conserving exceptional natural resources.

This integrated approach not only focuses on prioritizing efforts to focus on economic development, but also addresses the Commonwealth's priorities related to restoring and enhancing the environment, recreation, and cultural resources.

The Ten Keystone Principles are:

1. *Redevelop first:* Support revitalization of Pennsylvania's many cities and towns and give funding preference to reuse and redevelopment of "brownfield" and previously developed sites in urban, suburban, and rural communities.
2. *Provide efficient infrastructure:* Fix it first: use and improve existing infrastructure. Make highway and public transportation investments that use context-sensitive design to improve existing developed areas and attract residents and visitors to these places. Require private and public expansions of service to be consistent with approved comprehensive plans and consistent implementing ordinances.
3. *Concentrate development:* Support infill and "greenfield" development that is compact, conserves land, and is integrated with existing or planned transportation, water and sewer services, and schools. Foster creation of well-designed developments and neighborhoods that offer healthy life style opportunities for Pennsylvania residents.
4. *Increase job opportunities:* Retain and attract a diverse, educated workforce through the quality of economic opportunity and quality of life offered in Pennsylvania's varied communities. Integrate educational and job training opportunities for workers of all ages with the workforce needs of businesses. Invest in businesses that offer good paying, high-quality jobs, and that are located near existing or planned water and sewer infrastructure, housing, existing workforce, and transportation access (highway or transit).
5. *Foster sustainable businesses:* Strengthen natural resource-based businesses that use sustainable practices in energy production and use, agriculture, forestry, fisheries, and recreation and tourism. Increase our supply of renewable energy. Reduce consumption of water, energy, and materials to reduce foreign energy dependence and address climate change.

6. *Restore and enhance the environment:* Maintain and expand land, air, and water protection and conservation programs. Conserve and restore environmentally-sensitive lands and natural areas for ecological health, biodiversity, and wildlife habitat.
7. *Enhance recreational and heritage resources:* Maintain and improve recreational and heritage assets and infrastructure throughout the commonwealth, including parks and forests, greenways and trails, heritage parks, historic sites and resources, fishing and boating areas, and game lands offering recreational and cultural opportunities to Pennsylvanians and visitors.
8. *Expand housing opportunities:* Support the construction and rehabilitation of housing of all types to meet the needs of people of all incomes and abilities. Support local projects that are based on a comprehensive vision or plan; have significant potential impact (e.g., increased tax base, private investment); and demonstrate local capacity, technical ability, and leadership to implement the project.
9. *Plan regionally, implement locally:* Support multi-municipal, county, and local government planning and implementation that has broad public input and support and is consistent with these principles. Provide education, training, technical assistance, and funding for such planning and for transportation, infrastructure, economic development, housing, mixed use, and conservation projects that implement such plans.
10. *Be fair:* Support equitable sharing of the benefits and burdens of development. Provide technical and strategic support for inclusive community planning to ensure social, economic, and environmental goals are met.

It is acknowledged that discussing the potential of developing and implementing land use tools such as Comprehensive Plans, Subdivision and Land Development Ordinances, and Zoning Ordinances in some municipalities in Venango County may be a contentious issue.

To achieve the vision established in this plan, as well as the Venango County Comprehensive Plan, it is important to retain and expand upon the character of the County's communities as they set forth to achieve the vision and capitalize on the efforts of the Oil Heritage Region.

Therefore, it is recommended that the Venango County Regional Planning Commission, with the support of state, regional, non-profit agencies, continue and expand efforts to educate the local municipalities on the benefits of planning and the consequences of letting developers establish the vision and future of Venango County's character. This effort should be on-going.

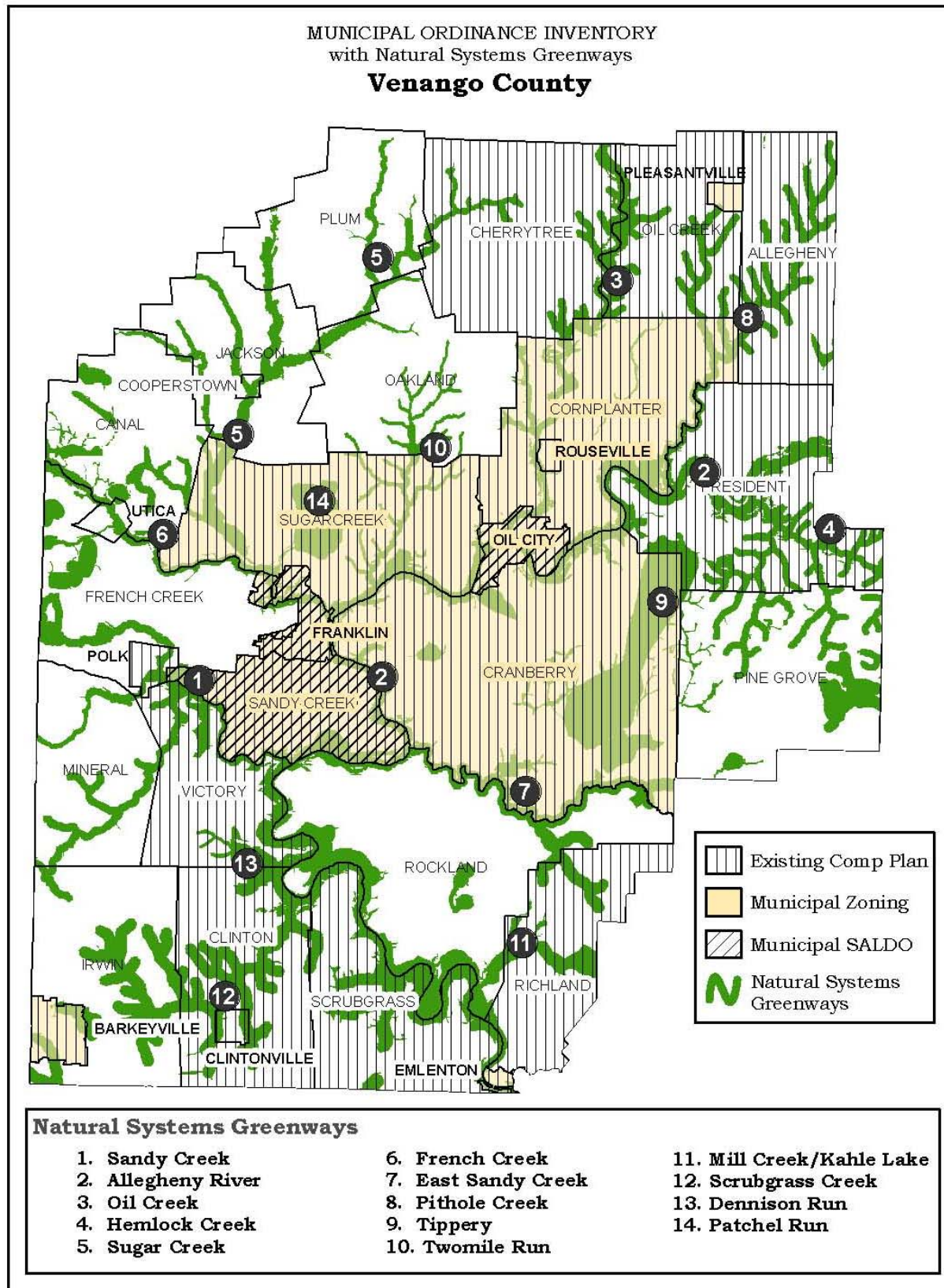
Agencies that can provide support in this effort include:

- Northwest Pennsylvania Planning and Development Commission
- Pennsylvania Department of Community and Economic Development
- Pennsylvania Department of Conservation and Natural Resources
- Pennsylvania Department of Environmental Protection
- 10,000 Friends of Pennsylvania

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The Pennsylvania Department of Community and Economic Development has a series of informative publications available to guide municipalities in exploring their options for planning their community. They are available from www.newpa.com and include:

- ✓ Community Revitalization Desktop Guide
- ✓ Pennsylvania Municipalities Planning Code
- ✓ Planning Series Publications
 - No. 1 - Local Land Use Controls in Pennsylvania
 - No. 2 - The Planning Commission
 - No. 3 - The Comprehensive Plan
 - No. 4 – Zoning
 - No. 5 - Technical Information on Floodplain Management
 - No. 6 - The Zoning Hearing Board
 - No. 7 - Special Exceptions, Conditional Uses and Variances
 - No. 8 - Subdivision and Land Development in Pennsylvania
 - No. 9 - The Zoning Officer
 - No. 10 - Reducing Land Use Barriers to Affordable Housing
- ✓ Growing Smarter Toolkit: Catalog of Financial and Technical Resources
- ✓ Planning for Agriculture
- ✓ The National Flood Insurance Program Pennsylvania Flood Plain Management Act (1978-166) Section 60.3 (B thru D) Series



PRIORITIES FOR MUNICIPAL PLANNING EDUCATIONAL EFFORTS

It is suggested that the County should municipal planning education efforts, related to greenways in Venango County, as indicated in the following table. Municipal planning educational efforts should be conducted in the short-term, one-to-three years, in those municipalities which contain exceptional priority natural system greenway corridors. It should be conducted in the mid-term, three-to-five years, for those municipalities containing significant priority natural system greenway corridors. Finally, in the municipalities which contain high priority greenway corridors, educational efforts should take place in the long-term, in five-to-ten years.

Municipality	Comprehensive Plan	Municipal Zoning Ordinance	Municipal Subdivision and Land Development Ordinance	Natural System Greenway Priorities		
Cities				Exceptional	Significant	High
Franklin	✓	✓	✓	2	6	
Oil City	✓	✓	✓	2, 3		
Boroughs						
Barkeyville Borough	✓	-	by County			
Clintonville Borough	✓	-	by County			12
Cooperstown Borough	-	-	by County		5	
Emlenton Borough	✓	✓	by County	2		
Pleasantville Borough	✓	-	by County		8	
Polk Borough	-	-	by County	1		
Rouseville Borough	✓	✓	by County	3		
Sugarcreek Borough	✓	✓	by County	2	5, 6, 10	14
Utica Borough	-	-	by County		6	
Townships						
Allegheny Township	✓	-	by County		8	
Canal Township	-	-	by County		5, 6	
Cherrytree Township	✓	✓	by County	3	5	
Clinton Township	✓	-	by County	2		12, 13
Cornplanter Township	✓	✓	by County	2, 3	8	
Cranberry Township	✓	✓	by County	2	7, 9	
Frenchcreek Township	-	-	by County	1	6	
Irwin Township	-	-	by County			12
Jackson Township	-	-	by County		5	
Mineral Township	-	-	by County	1		
Oakland Township	-	-	by County		5, 10	
Oilcreek Township	✓	-	by County	3	8	
Pinegrove Township	-	-	by County	4	9	
Plum Township	-	-	by County		5	
President Township	✓	-	by County	2, 4	8, 9	
Richland Township	✓	-	by County	2	7	11
Rockland Township	-	-	by County	2	7	11
Sandycreek Township	✓	✓	✓	1, 2		
Scrubgrass Township	✓	-	by County	2		12
Victory Township	✓	-	by County	1, 2		13

Venango County administers a Subdivision and Land Development Ordinance (SALDO) applicable to those municipalities that do not have a SALDO of their own.

Land Use Tools Audit

For those municipalities that do not have land development and subdivision ordinances that fall under the requirements of the Venango County Subdivision and Land Development Ordinance, it is recommended that the County Planning Commission consider amending the County SALDO to include provisions for the conservation of natural system greenway corridors. These requirements would be applicable to the above municipalities that rely on the County's SALDO.

Those communities represent approximately ninety percent of the municipalities in Venango County. Therefore, it is recommended that this review and adoption of revisions to the Venango County Subdivision and Land Development requirements be completed in the short-term, 1-to-3 years.

Furthermore, it is suggested that the Venango County Regional Planning Commission complete audits of existing municipal zoning and subdivision and land development ordinances of Venango County's municipalities. And that the Commission provide recommendations to each municipality on how their ordinances can be strengthened to accomplish the recommendations contained herein for the conservation of natural system greenway corridors and implementation of recreation greenways.

An amendment to the County Subdivision and Land Development Ordinance would address twenty-eight of the County's thirty-one municipalities, with the Franklin, Oil City, and Sandycreek Township the only municipalities with their own respective SALDO ordinances.

Specifically:

- Steep slope conservation provisions should not only include provisions for those slopes over 25%, but also for those slopes which are between 15% and 25%.
- Require conservation of streamside buffers consistent with the Pennsylvania Department of Environmental Protection's NPDES process. This process recommends that three zones be considered:
 - Zone A: 0 - 25' of center
 - Zone B: 25' - 100' of center
 - Zone C: 100' - 125' of center

It is recommended that no disturbance be permitted in Zone A, disturbance be limited to 15% in Zone B, and disturbance be limited to 30% in Zone C.

- Conservation of other natural system elements, as included in the Pocopson Ordinance cited earlier.
- Improve pedestrian and bicycling opportunities by requiring sidewalks in all development.
- Requiring interfaces between transit and pedestrian and bicycling facilities, such as secure bike lockers, bike racks, and on-board bike racks on buses.
- Requiring commuter bicycle support facilities in all commercial, industrial, and mixed use development, such as providing shower and locker room facilities, secure bike racks, and bicycle lockers.
- Requiring the establishment of bicycle lanes in residential and commercial subdivisions.

Venango County Greenways Plan

It is recommended that these audits be conducted based on the priorities established for the natural system greenway corridors. Therefore, those municipalities that are included in the Exceptional Priority natural system greenway corridors should be audited first.

Municipal Ordinance Audits to be Conducted in the Short-Term (1 to 3 years)

Utilizing this philosophy, the following municipal ordinances should be reviewed in the short-term, in one-to-three years, as they contain exceptional priority greenway corridors:

Municipality	Comprehensive Plan	Municipal Zoning Ordinance	Municipal Subdivision and Land Development Ordinance	Natural System Greenway Priorities		
Cities				Exceptional	Significant	High
Franklin	✓	✓	✓	2	6	
Oil City	✓	✓	✓	2, 3		
Boroughs						
Cooperstown Borough	-	-	by County		5	
Emlenton Borough	✓	✓	by County	2		
Polk Borough	-	-	by County	1		
Rouseville Borough	✓	✓	by County	3		
Sugarcreek Borough	✓	✓	by County	2	5, 6, 10	14
Townships						
Cherrytree Township	✓	✓	by County	3	5	
Clinton Township	✓	-	by County	2		12, 13
Complanter Township	✓	✓	by County	2, 3	8	
Cranberry Township	✓	✓	by County	2	7, 9	
Frenchcreek Township	-	-	by County	1	6	
Mineral Township	-	-	by County	1		
Oilcreek Township	✓	-	by County	3	8	
Pinegrove Township	-	-	by County	4	9	
President Township	✓	-	by County	2, 4	8, 9	
Richland Township	✓	-	by County	2	7	11
Rockland Township	-	-	by County	2	7	11
Sandycreek Township	✓	✓	✓	1, 2		
Scrubgrass Township	✓	-	by County	2		12
Victory Township	✓	-	by County	1, 2		13

Municipal Ordinance Audits to be Conducted in the Mid Term (3 to 5 years)

Cooperstown Borough's municipal ordinances should be reviewed in the mid term, in three-to-five years, as they contain a significant priority greenway corridor.

Municipal Ordinance Audits to be Conducted in the Long Term (5 to 10 years)

The following municipal ordinances should be reviewed in the long-term, in five-to-ten years, as they contain high priority greenway corridors:

Municipality	Comprehensive Plan	Municipal Zoning Ordinance	Municipal Subdivision and Land Development Ordinance	Natural System Greenway Priorities		
Boroughs						
Clintonville Borough	✓	-	by County			12
Townships						
Irwin Township	-	-	by County			12

Barkeyville is the only municipality that does not include a proposed natural systems greenway corridor. However, it is suggested their ordinances be audited in the long-term, 5-to-10 years, as there are other

important components, such as sidewalk requirements, pedestrian and bicycle facility development, etc. that should be considered as land is developed in Barkeyville.

Upon completing these audits, the municipalities should be furnished with model ordinances, and recommendations regarding how their specific ordinances can be improved to advance the greenways network established through this planning process.

MODEL ORDINANCE RECOMMENDATIONS

It is recommended that the County Subdivision and Land Development Ordinance be amended to include provisions for the conservation of natural resource components. Pocopson Township, in Chester County, has adopted a Natural Resource Protection Ordinance that was developed to conserve natural system greenway corridors, within their Township, in the context of addressing the goals noted above. The following table provides a summary of their conservation requirements:

Pocopson Township

Resource Element	Pocopson Township
	<i>Maximum Disturbance</i>
Floodplain Conservation District	0%
Very Steep Slopes	10%
Steep Slopes	25%
Steep Slope Margins	25%
Wetlands	0%
Inner Riparian Buffer	0%
Outer Riparian Buffer	15%
Seasonal High Water Table Soils	20%
Heritage Trees	0%
Rare Species Sites	0%
Exceptional Natural Areas	10%
Forest Interior Habitat	10%
Woodlands	5-25%, depending on classification

www.pocopson.org/

Venango County Greenways Plan

To assist Venango County and its municipal partners, useful models for greenway implementation have been identified. These models were taken from reliable sources and have been successfully used in the Commonwealth. If used, these models should be a guide and should be tailored to meet each municipality's unique circumstances. Most importantly, they should be reviewed by the municipality's solicitor before adoption. These models include:

Title	Source	For Additional Information
Pennsylvania Standards for Residential Site Development	Penn State University, Pennsylvania Housing Research / Resource Center	www.engr.psu.edu/phrc/Land%20Development%20Standards.htm
Better Development Models for Pennsylvania	The Conservation Fund and Pennsylvania Department of Conservation and Natural Resources	www.pagreenways.org/brc/grants/2005/BetterModels.pdf
Resource Protection Ordinance	Resource Protection Ordinance	Pocopson Township PO Box 1 Pocopson, PA 19366
Model Conservation Ordinance	Pennsylvania Land Trust Association	http://conserveland.org
Model Riparian Forest Buffer Protection Ordinance	Pennsylvania Land Trust Association	http://conserveland.org
Model Stream Corridor Buffer Easement	Pennsylvania Land Trust Association	http://conserveland.org
Model Trail Easement Agreement	Pennsylvania Land Trust Association	http://conserveland.org
Model Fishing Access Agreement	Pennsylvania Land Trust Association	http://conserveland.org
Water Quality Improvement Easement	Pennsylvania Land Trust Association	http://conserveland.org
Stream Corridor Protection Ordinance - Upper Salford Township	Delaware Valley Regional Planning Commission	www.dvrpc.org/planning/community/protectiontools/ordinances.htm
Forestry Management Model Regulations	Penn State University School of Forestry	pus.cas.psu.edu/freepubs/pdfs/uh171.pdf

STORMWATER MANAGEMENT AND WATER QUALITY

Proper stormwater management and water quality management are two important issues that impact many facets of daily life in Venango County.

From an analysis of The National Climatic Data Center, one can conclude the Northwestern Pennsylvania Counties are ranked as follows when it comes to total number of flood events between 1950 and 2000. Venango County is thirty-sixth, out of a total of sixty-seven counties, when it comes to frequency of flood events over the past ten years.

County	Total No. Flood Events	County Ranking (67 Total)	Annual Avg. Frequency
Crawford	68	12th	1.36
Erie	50	25th	1.00
Venango	42	36th	0.84
Clarion	35	41st	0.70
Mercer	35	43rd	0.70
Warren	30	50th	0.60
Lawrence	25	55th	0.50
Forest	14	64th	0.28

Source: http://pasc.met.psu.edu/PA_Climatologist/extreme/Floods/PEMA_fl

Over the years, flooding has been an issue along Sandy Creek, Little Sandy Creek, and Oil Creeks. It is recommended Venango County Regional Planning Commission, Venango County Conservation District, and Pennsylvania Department of Environmental Protection work with the local municipalities to identify potential projects that can reduce and / or eliminate flood impacts in these areas.

It is recommended that the Venango County Regional Planning Commission, the Venango County Conservation District, and the Pennsylvania Department of Environmental Protection work with local municipalities in Venango County to educate them on the benefits of stormwater management practices, including the Pennsylvania Stormwater Best Management Practices Manual.

The philosophy of managing stormwater has changed over the years. Initially, stormwater management began with ensuring water was diverted around development. This had negative consequences. For example, increases in stormwater runoff volumes caused downstream flooding. The remedy was to introduce requirements to maintain the rate of stormwater runoff from a site to pre-development conditions despite an increase in impervious area. The consequence of this was that stormwater was being held and released at the pre-development rate, reducing downstream flooding impacts. However, this also created its own set of problems. First, water quality was being negatively impacted, as sediment and chemicals were not being filtered from the stormwater. Therefore, our streams which received the stormwater were being polluted, and the water quality was being impaired. Second, due to an increase in impervious areas, and development of stormwater ponds that released water directly to streams, our water tables were not being adequately recharged. Therefore, current stormwater practices not only take into consideration the management of stormwater runoff rates; but they also take into consideration volume, infiltration, and water quality.

Therefore, the goal of current stormwater management practices is to retain the rates and volumes of stormwater runoff to pre-development levels; infiltrate stormwater into the site when possible; and maintain and / or improve water quality of the receiving stream by filtering chemicals and sediment from the water before it reaches its receiving stream and / or water body.

The purpose of the Pennsylvania Stormwater Best Management Practices (BMP) Manual is to provide guidance, options, and tools that can be used to protect water quality; enhance water availability; and reduce flooding potential through effective stormwater management. The manual presents design standards and planning concepts for use by local authorities, planners, land developers, engineers, contractors, and others involved with planning, designing, reviewing, approving, and constructing land development projects.

The manual describes a stormwater management approach to the land development process that strives to prevent or minimize stormwater problems through comprehensive planning and development techniques, and to mitigate any remaining potential problems by employing structural and non-structural best management practices. Manual users are strongly encouraged to follow the progression of prevention first and mitigation second. Throughout the chapters of the manual, the concept of an integrated stormwater management program, based on a broad understanding of the natural land and water systems, is a key and recurring theme. Such a thorough understanding of the natural systems demands an integrated approach to stormwater management so critical to “doing it better, doing it smarter.”

The manual provides guidance on managing all aspects of stormwater: rate, volume, quality, and groundwater recharge. Controlling the peak rate of flow during extreme rainfall events is important, but it is not sufficient to protect the quality and integrity of Pennsylvania streams. Reducing the overall volume of runoff during large and small rainfall events, improving water quality, and maintaining groundwater recharge for wells and stream flow are all vital elements of protecting and improving the quality of Pennsylvania’s streams and waterways.

It is recommended that the PA DEP, Venango County Regional Planning Commission, Venango County Conservation District, and the local municipalities identify opportunities within the natural systems greenway corridors, in which demonstration projects can be implemented to illustrate this current philosophy in stormwater best management practices.

FOSSIL FUEL EXTRACTION AND RENEWABLE ENERGY SOURCES

Given the recent spikes in oil and gas costs, efforts to identify new sources of fossil fuel and renewable energy opportunities have increased.

In the past few years, research has determined that it may be financially feasible to extract natural gas from the Marcellus Shale field located in the Appalachian region. The Marcellus Shale, also referred to as the Marcellus Formation, is a Middle Devonian-age black, low density, carbonaceous shale that occurs in the subsurface beneath much of Ohio, West Virginia, Pennsylvania, and New York. Small areas of Maryland, Kentucky, Tennessee, and Virginia are also underlain by the Marcellus Shale.

In early 2008, Terry Englander, a geosciences professor at The Pennsylvania State University and Gary Lash, a geology professor at The State University of New York at Fredonia estimated that the Marcellus Shale might contain more than 500 trillion cubic feet of natural gas. Using some of the same horizontal drilling and hydraulic fracturing methods that had previously been applied in the Barnett Shale of Texas, perhaps ten percent of that gas might be recoverable. That volume of natural gas would be enough to supply the entire United States for about two years and have a wellhead value of about one trillion dollars.

Extracting the natural gas from the Marcellus Shale requires deep vertical and horizontal wells and associated support facilities. Care must be taken in locating these facilities in a manner which will not negatively impact the natural resources of the Northwestern Pennsylvania Region.

The harnessing of wind energy in Pennsylvania is another rapidly growing industry. Although it is a renewable resource, it is not without controversy. Many are concerned about a commercial wind farm’s

impact on migratory birds and their visual intrusion into the landscape, while others see it as an opportunity to reduce our dependency on fossil fuels.

With the passage of Pennsylvania's Growing Greener II initiative, \$80 million over four years will be provided to expand the grant program earmarked for wind energy in the state. A public dialogue and input process is paramount in ensuring commercial wind farms are located on sites where the turbines will not have a significant negative impact on wildlife, migratory birds, residential areas, and scenic views.

According to the U.S. Department of Energy National Renewable Energy Laboratory's "Pennsylvania 50M Wind Resource Map", wind power densities are considered to be poor. Therefore, it is not expected that there will be much interest in establishing wind farms in Venango County.

Natural gas extraction from the Marcellus Shale and the harnessing of wind energy may be important factors to the region's economy in the future. Therefore, efforts should be taken to ensure they can occur in harmony with the natural system greenways proposed herein.

The GIS data assembled for this project is an important resource that can aid in identifying where natural gas extraction and the harnessing of wind energy can occur in harmony with the natural system resources of the Northwest Region.

IMPLEMENTATION OF VENANGO COUNTY'S GREENWAY NETWORK

The implementation of natural systems greenways will rely on a proactive approach from public and private sectors. From the public side, it is suggested the implementation of natural systems greenway corridors begin with the Venango County Regional Planning Commission, the Oil Region Greenways and Open Space Coordinator, and the partners identified herein. These agencies can provide Venango County's municipalities, trail, and conservancy organizations with their guidance and expertise to advise, guide, coordinate, and assist in the implementation of those strategies recommended herein.

IMPLEMENTATION PARTNERS

In addition to the Oil Region Greenways and Open Space Coordinator and the Venango County Regional Planning Commission, other important public partners in this endeavor will include:

- Venango County Conservation District
- Oil Heritage Region
- Pennsylvania Department of Conservation and Natural Resources, Oil Creek State Park
- Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry
- Pennsylvania Fish and Boat Commission
- Pennsylvania Game Commission
- Pennsylvania Department of Transportation
- Pennsylvania Department of Environmental Protection
- Local Municipalities

From the private sector, involvement should come from various avenues and stakeholders, such as education, health care, main streets, economic development, and non-profit sectors, and may include:

- Oil Region Alliance of Business, Industry, and Tourism, Inc.
- Allegheny Valley Trails Association
- Allegheny Valley Conservancy
- Franklin Area Chamber of Commerce
- Franklin Industrial and Commercial Development Authority
- Venango Area Chamber of Commerce
- Woodland Owners of Clarion – Allegheny Valley
- Pennsylvania Sustainable Forestry Initiative
- Pennsylvania Hardwood Development Council
- Allegheny Hardwood Utilization Group
- Woodland and Lumber Industry Partnership
- Pennsylvania State University Agricultural Extension Office, Venango County
- Seneca Rocks Audubon Society
- Bartramian Audubon Society
- Western Pennsylvania Conservancy
- The Nature Conservancy
- University of Pittsburgh Medical Center – Northwest
- Adagio Health – Venango County
- Trout Unlimited

IMPLEMENTATION STRATEGIES

The following tables offer step-by-step recommendations outlining the process of implementing the proposed Venango County greenways network, as defined through this study process.

The first step involves formally adopting a vision for Greenways in Venango County. The implementation strategies are outlined in the following tables. These tables document the sequence of events required to carry the greenways plan from the Vision, described earlier in this plan, to the implementation of natural system, recreation, and transportation greenway corridors.

Implementation strategies are organized into Adopting a Vision for Greenways in Venango County and Advancing Greenways at the Local Level.

Each implementation strategy: includes a brief description of the task, identifies possible responsible parties, sets a priority for completing the task, provides an estimate of costs associated with completing the task, and provides planners with the opportunity to track the process of implementing the plan.

The following priorities have been defined through the planning process:

Short-Term Priorities (S): should be accomplished within one-to-three years after official adoption of the Greenways Plan. These strategies will lay the foundation for successful implementation of the greenways plan recommendations.

Mid-Term Priorities (M): should be undertaken in three-to-five years.

Long-Term Priorities (L): are expected to be completed in five-to-ten years.

Many of the strategies have little or no cost beyond the administrative costs incurred by the responsible parties. However, other strategies may require substantial funding. When costs are provided, the estimates are “ball park” figures in 2008 dollars. These costs were established based on experience with other projects or initiatives. For each year beyond 2008, the costs should be multiplied by a factor of 4.5% to account for escalation of the costs associated to perform the task. Detailed feasibility studies and other pre-design and / or implementation work will refine these costs.

It is recommended that Venango County and all of the partners identified herein review these tables periodically to determine which tasks have been accomplished, which should be undertaken next, and where adjustments need to be made. It is recommended that the status column of the tables be used to record the beginning and completion dates for each task, as it is implemented. This will allow Venango County and all partner organizations to track their progress towards the implementation of each strategy.

The following tables outline the plan of action to implement the greenways vision for Venango County. Actual implementation will depend on fiscal and political climate in any given year, partner organizations, or municipality, making it essential that the tables be reviewed and updated often.

Following these tables, various Implementation Resources are discussed which are available to assist in the implementation of the recommendations contained herein.

Venango County Greenways Plan

Adopting the Vision for Greenways in Venango County

Task	Partners	Priority	Cost	Potential Funding Sources	Status	
					Begin	Completed
Adopting the Vision for Greenways in Venango County						
Officially adopt the Venango County Greenways Plan as an amendment to the Venango County Comprehensive Plan.	Venango County Regional Planning Commission (VCRPC) and the Venango County Commissioners	S	Admin. Time	n/a		
Management Structure						
Utilize the services of the existing Oil Region Greenways and Open Space Coordinator.	Oil Region Greenways and Open Space Coordinator (ORGOSC)	S	\$85,000, paid for by organizations participating on the Oil Region Greenways and Open Space Steering Committee	PA DCNR PA DCED Foundations Participating coalition members		
Marketing / Education / Promotion						
Spread the Word - celebrate the vision adopted for Venango County Greenways through regional and local television, newspaper, radio, and internet news agencies.	Stakeholders, partner organizations, ORGOSC, with support from VCRPC	S	Volunteer / In-Kind	n/a		
Develop detailed public marketing, education, and promotion campaign to inform county residents and elected officials about the benefits of greenways implementation, and promote the many attractions of the greenway network.	ORGOSC, with support from: Oil Region Alliance (ORA), VCRPC, Venango County Conservation District, Venango County Agricultural Preservation Board, Western Pennsylvania Conservancy, PA DCNR, PA DEP, PA Game Commission, Oil Creek State Park, and the Drake Well Museum, and other supporting organizations	S	\$25,000	PA DCNR PA DEP PA DCED Foundations		

Venango County Greenways Plan

Adopting the Vision for Greenways in Venango County (continued)

Task	Partners	Priority	Cost	Potential Funding Sources	Status	
					Begin	Completed
Marketing / Education / Promotion (continued)						
Explore opportunities to partner with Venango County Health community to advance greenways implementation.	ORGOSC with the support from: VCRPC, University of Pittsburgh Medical Center – Northwest, Adagio Health – Venango County, local physician organizations, PANA, and other supporting organizations	S	Admin. Time	Pennsylvania Advocates for Nutrition and Activity		

Venango County Greenways Plan

Advancing the Natural Systems Greenways at the Local Level

Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Implement Land Use Tools at the County Level to assist in Achieving the Vision for Greenways in Venango County						
Meet with elected officials to educate them on the benefits of updating the County's SALDO to promote greenway planning and implementation.	Oil Region Greenways and Open Space Coordinator (ORGOSC), VCRPC, Venango County Conservation District (VCCD), Municipal Planning Commissions	On-Going	Admin. Time	n/a		
Update County Subdivision and Land Development Ordinance to strengthen conservation of natural system greenway components.	VCRPC / Municipalities with technical assistance from the ORGOSC	S	In-Kind Services / \$15,000	PA DCED		
Update County Subdivision and Land Development Ordinance review process to include the submission of a site analysis which documents the locations of those natural resources, which are to be conserved on the site.	VCRPC	S	In-Kind Services	n/a		
Update County Subdivision and Land Development Ordinance review process to categorize those sites with such features as major subdivisions, which require a more thorough review.	VCRPC	S	In-Kind Services	n/a		
Develop, implement, and adopt a county-wide zoning ordinance that promotes the conservation of natural resources.	VCRPC / Municipalities	S	PA DCED	\$80,000		
Educate Municipal Officials and Residents						
Identify potential pilot municipalities and / or land managers	ORGOSC, VCRPC, VCCD, Municipal Officials and Planning Commissions	On-Going	Admin. Time	n/a		
Meet with elected officials and / or land managers to educate them on the benefits of greenway planning and implementation.	ORGOSC with the support from: VCRPC, VCCD, PA DEP, Municipal Officials and Planning Commissions	On-Going	Admin. Time	In-Kind Services		

Venango County Greenways Plan

Advancing the Natural Systems Greenways at the Local Level (continued)

Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Educate Municipal Officials and Residents (continued)						
Hold a public meeting to educate the residents of the municipality on the benefits of greenway planning and implementation.	ORGOSC with the support from: PA DEP, VCRPC, VCCD, Municipal Officials and Planning Commissions	On-Going	Admin. Time	In-Kind Services		
Meet with potential pilot municipalities and / or land managers to discuss the goals of the greenways plan and the means of advancing greenways through local planning efforts.	ORGOSC with the support from: VCRPC, VCCD, Municipal Officials and Planning Commissions and / or land managers	On-Going	Admin. Time	In-Kind Services		
Implement the agreed upon means of conserving natural system resources within the pilot greenway corridor.	ORGOSC, VCRPC, VCCD, Municipal Officials and Planning Commissions and / or land managers	On-Going	Admin. Time	In-Kind Services		
Identify Opportunities for Additional Comprehensive Planning, Greenway Planning, Zoning Implementation, and / or Subdivision and Land Development Ordinance Implementation at the Municipal Level						
Educate potential municipalities on the benefits of planning and implementation of land use tools.	ORGOSC and VCRPC	On-Going	Admin. Time	In-Kind Services		
Assist municipalities, when requested, with comprehensive planning, and zoning and subdivision and land development efforts.	VCRPC	On-Going	\$40-60K Comp Plan \$20K Zoning \$10K SALDO per municipality	DCED		
Create package of incentives, including provision of matching funds, grant writing, and other technical assistance to encourage municipalities to implement greenway recommendations at the municipal level.	VCRPC Municipal Services with assistance from ORGOSC	S	\$20,000 annually	DCNR / DCED / Foundations		

Venango County Greenways Plan

Advancing the Natural Systems Greenways at the Local Level (continued)

Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Utilize GIS Data Assembled for Greenways Planning Effort as a Pro-Active Tool to Guide Land Development in Venango County						
Provide on-going training of VCRPC staff person in GIS operations	VCRPC	On-Going	\$2,500 annually			
Educate municipal officials on what resources are available to them early in the planning process.	VCRPC and Venango County GIS Analyst	S	Admin. Time	In-Kind Services		
Institute process at the municipal level, where municipality / potential developer requests query of GIS data to identify natural system greenway corridors, and their resources, on a particular site before planning / design effort for development begins.	VCRPC and Venango County GIS Analyst	S	Admin. Time	In-Kind Services		
Conduct Zoning and Subdivision and Land Development Audits of Existing Ordinances						
Identify potential pilot municipalities.	ORGOSC, VCRPC, VCCD, Municipal Officials, PA DEP, and Planning Commissions	On-Going	Admin. Time	n/a		
Meet with potential pilot municipalities to discuss the goals of the greenways plan and the means of advancing greenways through local planning efforts.	VCRPC, ORGOSC with the support from: VCCD, PA DEP, Municipal Officials and Planning Commissions	On-Going	Admin. Time	n/a		
Request pilot municipalities to adopt the Venango County Greenway Plan as the guiding document for greenway efforts in their municipality.	VCRPC, ORGOSC with the support from: VCCD, PA DEP, Municipal Officials and Planning Commissions	On-Going	Admin. Time	n/a		
Complete audits of the SALDO and / or Zoning Ordinances in the following municipalities: Franklin, Oil City, Cooperstown, Emlenton, Polk, Rouseville, Sugarcreek, Cherrytree, Cornplanter, Cranberry, Frenchcreek, and Sandycreek Townships.	VCRPC with support from ORGOSC	S	Admin. Time	n/a		
Complete audits of the SALDO and / or Zoning Ordinances in Cooperstown.	VCRPC with support from ORGOSC	M	Admin. Time	n/a		

Venango County Greenways Plan

Advancing the Natural Systems Greenways at the Local Level (continued)

Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Identify and Secure Funding for Demonstration Projects to Advance the Proposed Natural System Greenway Corridors						
Identify key players that will help carry out pilot projects explore possibility of public / private partnerships with possible public and private partners.	ORGOSC with the support from VCRPC	On-Going	In-Kind Services	n/a		
Identify pilot projects in the exceptional priority greenway corridors which will achieve the goals of: Conserving natural system greenway resources through acquisition of easements and property; Improving water quality; Improving access to water Reducing flooding Improving stormwater management; Reducing nonpoint source pollution & improving water quality; and Establishing stream side buffers.	ORGOSC with the support from: VCRPC, VCCD, PA DEP, and local municipalities	S	\$300,000	PA DCNR PA DEP PA DCED PennDOT PA Fish & Boat Commission		
Identify pilot projects in the significant priority greenway corridors which will achieve the goals of: Conserving natural system greenway resources through acquisition of easements and property; Improving water quality; Improving access to water features; Reducing flooding Improving stormwater management; Reducing nonpoint source pollution & improving water quality; and Establishing stream side buffers.	ORGOSC with the support from: VCRPC, VCCD, PA DEP, and local municipalities	M	\$600,000	PA DCNR PA DEP PA DCED PennDOT PA Fish & Boat Commission		

Venango County Greenways Plan

Advancing the Natural Systems Greenways at the Local Level (continued)

Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Identify and Secure Funding for Demonstration Projects to Advance the Proposed Natural System Greenway Corridors (continued)						
Identify pilot projects in the high priority greenway corridors which will achieve the goals of: Conserving natural system greenway resources through acquisition of easements and property; Improving water quality. Improving access to water features; Reducing flooding Improving stormwater management; Reducing nonpoint source pollution & improving water quality; and Establishing stream side buffers.	ORGOSC with the support from: VCRPC, VCCD, PA DEP, and local municipalities	L	\$300,000	PA DCNR PA DEP PA DCED PennDOT PA Fish & Boat Commission		
Explore opportunities to enhance ecotours in opportunities in Venango County.	ORGOSC, ORA	S	In-Kind Services	n/a		
Work with timber producers to establish conservation easements for natural systems greenway corridors through their holdings.	ORGOSC with the support from: VCRPC, VCCD, Western Pennsylvania Conservancy, DCNR Bureau of Forestry	On-going	Unknown, if any			
Establish Natural Systems Greenway Network						
Identify potential partners (land trust organizations, land managers, property owners, etc.) in establishing conservation corridors.	ORGOSC with the support from: Municipal Officials, municipal Planning Commissions, Conservation Organizations, and VCRPC	On-Going	n/a	in-kind services		

Venango County Greenways Plan

Advancing the Natural Systems Greenways at the Local Level

Task	Responsible Parties	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Establish Natural Systems Greenway Network						
Secure grants and matching funds. Negotiate with land owners to conserve natural infrastructure resources Secure easements and property from land owners Enact municipal land use tools that conserve specific resources and create incentives for conservation of natural system greenway corridors Develop a signing system to promote and indicate locations of natural systems greenways	ORGOSC with support from: Municipal Officials, Planning Commissions, Conservation Organizations, and VCRPC	On-Going	Varies greatly, site / project specific	PA DEP PA DCNR PA DCED PA Fish & Boat Commission Foundations		
Implement Exceptional Priority Natural System Greenway Corridors - Sandy Creek Greenway Corridor - Alleghney River Greenway Corridor - Oil Creek Greenway Corridor - Hemlock Creek Greenway Corridor	ORGOSC and Partner Organization(s) and Individuals with the support of: Municipal Officials, Planning Commissions, PA DCNR, Conservation Organizations, and VCRPC	S	Varies greatly, site / project specific	PA DEP PA DCNR PA DCED PA Fish & Boat Commission Foundations		
Implement Significant Priority Natural System Greenway Corridors - Sugar Creek Greenway Corridor - French Creek Greenway Corridor - East Sandy Creek Greenway Corridor - Pithole Creek Greenway Corridor - Tippiery Greenway Corridor - Two Mile Run Greenway Corridor	ORGOSC and Partner Organization(s) and Individuals with the suppoer of: Municipal Officials, Planning Commissions, PA DCNR, Conservation Organizations, and VCRPC	M	Varies greatly, site / project specific	PA DEP PA DCNR PA DCED PA Fish & Boat Commission Foundations		
Implement High Priority Natural System Greenway Corridors - Mill Creek / Kahle Lake Greenway Corridor - Scrubgrass Creek Greenway Corridor - Dennison Run Greenway Corridor - Patchel Run Greenway Corridor	ORGOSC and Partner Organization(s) and Individuals with the suppoer of: Municipal Officials, Planning Commissions, PA DCNR, Conservation Organizations, and VCRPC	L	Varies greatly, site / project specific	PA DEP PA DCNR PA DCED PA Fish & Boat Commission Foundations		

Venango County Greenways Plan

Advancing the Natural Systems Greenways at the Local Level (continued)

Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Ensuring Success Marketing / Promotion						
Implement marketing strategies formed in the early stages of greenways planning, with emphasis on economic development	ORGOSC, VCRPC, ORA	S	\$10,000 annually			
Celebrate successes and actively solicit support and coverage from local television, newspaper, radio, and internet news agencies.	ORGOSC and VCRPC	on-going	In-Kind Services	n/a		

Venango County Greenways Plan

Advancing the Recreation and Transportation Greenways at the Local Level

Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Coordination with Local Trail Organizations / Municipalities and Other Stakeholders						
Meet with local trail organizations to review recommendations for recreation greenways that resulted from County greenway planning process.	ORGOSC	S	Admin. Time	n/a		
Review process for planning and developing recreation greenways with trail organizations.	ORGOSC	S	Admin. Time	n/a		
Oil Heritage Region						
Develop interpretive programs which focus on telling the stories of the hertiage region in Venango County.	Oil Region Alliance and ORGOSC	M	unknown	DCNR, DCED		
Utilize heritage region wayfinding systems to guide visitors to and from Venango County greenway opportunities.	Oil Region Alliance and ORGOSC	S, M	unknown	DCNR, DCED		
Shared Use Trail Implementation Strategies						
Secure funding and improve unimproved section of the Allegheny River Trail.	ORGOSC, Allegheny Valley Trails Association	S	\$264K to \$528K	DCNR, DCED, PennDOT, Foundations, Venango County, Local Municipalities		
Secure funding and extend Oil Creek State Park Trail, between Rynd Farm and Petroleum Centre.	PA State Parks, ORGOSC, ORA, Allegheny Valley Trails Association, with support from VCRPC	S	\$792K to \$1.58M	State Parks, DCNR, DCED, PennDOT, Foundations		
Secure funding and establish McClintock Trail between Oil City and Rynd Farm.	ORA, ORGOSC, Cornplanter Township	S	\$1.8M to \$3.7M	DCNR, DCED, PennDOT, Foundations, Venango County, Local Municipalities		

Venango County Greenways Plan

Advancing the Recreation and Transportation Greenways at the Local Level (continued)						
Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Water Trail Implementation Strategies						
Evaluate Allegheny River Water Trail to determine issues and concerns and identify solutions to address those items, i.e. lack of public restrooms along corridor, etc.	ORGOSC, PA Fish and Boat Commission with support from VCRPC	S	\$25,000	PA Fish & Boat Commission / PA DCNR		
Work with local municipalities to revitalize and re-establish the French Creek Water Trail.	ORGOSC, French Creek Project with support from VCRPC	S	unknown	PA Fish & Boat Commission PA DCNR		
Meet with PA Fish and Boat Commission, and local municipalities to discuss feasibility of establishing a PA Fish & Boat Commission designated Water Trail on Oil Creek.	ORGOSC, Cornplanter Township with support from VCRPC	S	In-Kind Services	PA Fish & Boat Commission		
If necessary, complete Oil Creek Water Trail Feasibility Study.	ORGOSC, Cornplanter Township with support from VCRPC	S	\$30,000	PA DCNR		
If feasible, locate put in / take out opportunities, confirm property ownership, secure public access to locations for proposed Oil Creek Water Trail.	ORGOSC, Cornplanter Township with support from VCRPC	S	Unknown	PA Fish & Boat Commission PA DCNR		
Improve Allegheny River Water Trail by implementing recommendations of the Allegheny River Water Trail Evaluation.	ORGOSC, with support from VCRPC, PA Fish and Boat and PA Environmental Council	M	Unknown	PA Fish & Boat Commission PA DCNR PA DCED & municipalities		
If feasible, establish Oil Creek Water Trail and access points.	ORGOSC, with support from VCRPC	M	Unknown	PA Fish & Boat Commission PA DCNR		

Venango County Greenways Plan

Advancing the Recreation and Transportation Greenways at the Local Level (continued)						
Task	Partners	Priority	Cost	Potential Funding	Status	
					Begin	Completed
Pedestrian and Bicycle Trail Implementation Strategies						
Complete Bicycle Suitabilty Map for Venango County.	ORGOSC with support from VCRPC	S	local volunteers	PennDOT, DCED, DCNR, Foundations		
Implement proposed Valley Grove Community Trail.	Allegheny Valley Trails Association, Valley Grove School District, partner health organizations	S	unknown	DCNR, Blue Cross Blue Shield		
Conduct complete streets study for Cramberry Mall pedestrian and bicycle improvements	Cranberry Township, with support of VCRPC and Cranberry Area School District	S	unknown	DCED, DCNR		
Trail Town Implementation						
Conduct trail town audit and develop trail town master plan for Franklin.	ORGOSC, City of Franklin, with support from VCRPC	S	\$30,000	PA DCED PA DCNR Foundations		
Conduct trail town audit and develop trail town master plan for Oil City.	ORGOSC, Oil City, with support from VCRPC	S	\$30,000	PA DCED PA DCNR Foundations		
Implement trail town master plan recommendations for Franklin and Oil City.	ORGOSC, City of Franklin, Oil City, with support from VCRPC	S / M	unknown	PA DCED Foundations		
Develop trail town master plan for Emlenton.	ORGOSC, Emlenton Borough, with support from VCRPC	S	unknown	PA DCED PA DCNR Foundations		
Implement trail town master plan recommendations for Emlenton.	ORGOSC, Emlenton Borough, with support from VCRPC	M	unknown	PA DCED PA DCNR Foundations		
Ensuring Success Marketing / Promotion						
Conduct Allegheny River Water Trail Economic Impact Analysis Study.	ORGOSC, Northwest Commission, with the support from VCRPC	S	\$25,000	PA DCNR		
Implement marketing strategies formed in the early stages of greenways implementation, with emphasis on economic development potential.	ORGOSC with the support from VCRPC, Northwest Commission, ORA, and other partners	on-going	\$10,000 annually			

DEMONSTRATION PROJECT OPPORTUNITIES

Quick successes are important to show residents of the County that implementation of greenway projects in Venango County can provide many benefits, as documented in the Introduction to this plan, and that further implementation of the recommendations are warranted.

Opportunities were identified in each of the greenway feature categories to allow the County and partner organizations to advance greenways at all levels. Demonstration project opportunities were selected in Venango County based on the following criteria:

1. Was prioritized as a critical or exceptional priority at the regional level
2. Has a local partner / advocate
3. Can be realistically achieved
4. Provides opportunity for economic development (recreation and transportation greenway corridors)

For conservation corridors, the criteria was developed to conserve those areas of the County that have the most significant natural infrastructure components that are desired to be maintained because they provide essential functions.

Utilizing these sets of criteria, the Steering Committee recommended the following demonstration project opportunities in Venango County:

LAND BASED TRAILS

Venango County, participating municipalities, and the participating trail organizations are to be commended for their efforts in establishing land based trails in the County. Their success has lead to the establishment of a shared use path trail that extends from the County's southeastern border to the County's northern border with Crawford County, near the City of Titusville. Further, this route is the primary route being proposed for the Erie to Pittsburgh Greenway, a regional effort of the Erie to Pittsburgh Trail Alliance. Therefore, it is recommended that every effort be made to complete the final remaining gaps, improve the existing trail corridor where necessary, and provide local partners and organizations with the capacity and funding to ensure the long-term management and operations of trail located in this corridor.

The Oil Region Alliance of Business, Industry and Tourism has been actively advancing the planning and design of the McClintock Trail alignment to complete the gaps that exists between the existing Justus and Oil Creek State Park Trails. It is recommended that the implementation of a trail in this corridor be a priority so one of the final gap in Venango County's portion of the Erie to Pittsburgh Trail can be completed. Furthermore, the Rynd Farm to Petroleum Centre portion of this corridor should also be a priority for completion.

WATER TRAILS

Local partner organizations must be identified and work with the Pennsylvania Fish and Boat Commission to:

- Re-establish the French Creek Water Trail and have it officially recognized in the Pennsylvania Fish and Boat Commission's Water Trail Program. The participating Counties and municipalities along the trail should be advocates for the trail and work with the private sector to re-establish one or two canoe liveries along the trail to confirm that all of the access points are

under public control or there is an agreement with the landowner for public access. All of these tasks should be completed before the French Creek Water Trail is again publicly promoted.

The anticipated costs associated with developing this water trail include:

- Acquisition of access points: unknown
- Sign access points and access point improvements: \$50,000
- Development of water trail brochure..... \$15,000

Funding for these efforts may be available through the Pennsylvania Fish and Boat Commission, the Pennsylvania Department of Conservation and Natural Resources, and local foundations.

- Conduct a feasibility study to determine whether it is feasible to establish an official Fish and Boat Commission Water Trail and associated access points and support facilities along Oil Creek.

It is estimated that it will cost approximately \$35,000 to complete a feasibility study for the proposed Oil Creek Water Trail.

Funding for this effort may be available through the Pennsylvania Department of Conservation and Natural Resources and local foundations.

TRAIL TOWNS

Of the trail towns being proposed for Venango County, it is recommended that focus be placed on developing and implementing a trail town philosophy in the City of Oil City, the City of Franklin, and Emlenton Borough. The Oil Region Greenways and Open Space Coordinator can lead these municipalities, their business communities, and other partner organizations in an effort to actively begin establishing the trail town philosophy implementing a Trail Town program, and establishing these communities as Trail Towns along the regionally significant Erie to Pittsburgh Greenway corridor.

It is recommended that a total of \$65,000 be budgeted to conduct trail town master planning process for the City of Oil City, the City of Franklin, and Emlenton Borough.

Funding for this effort may be available through the Pennsylvania Department of Community and Economic Development, Pennsylvania Department of Conservation and Natural Resources, and local foundations.

NATURAL SYSTEMS GREENWAY CORRIDORS

The following Venango County Natural Systems Greenway Corridors have been identified at the regional level as priority corridors:

- ✓ Sandy Creek Greenway Corridor
- ✓ Allegheny River Greenway Corridor
- ✓ French Creek Greenway Corridor

The corridors were selected based on their value to conserve natural resources in their corridors, as well as their ability to retain the natural character of the land and water based trails with which they are associated.

Opportunities to implement conservation, enhancement, and restoration projects along these corridors can be completed by:

Immediate Priorities:

- Develop an education and outreach plan about the benefits and tools of establishing natural systems greenways
- Establish designated waterway access points
- Develop and adopt stream buffer standards at the county and municipal level
- Prioritize needed easements

Short-Term Priorities:

- Obtain easements and develop stewardship plans
- Implement stormwater plans at the County and municipal level
- Enhance zoning and subdivision and land development ordinances

Ongoing Priorities:

- Promote sustainable practices
- Implement practices to manage invasive species
- Implement practices to reduce non-point source pollution
- Preparing management plans that address species of special concern and natural communities
- Promoting sustainable timber practices
- Enhancing existing Zoning and Subdivision and Land Development Tools by strengthening them for the conservation of natural greenways corridors

An annual pool of funding should be allocated in Venango County to fund the implementation of the demonstration projects. Funding for these efforts may be available through the Pennsylvania Department of Environmental Protection, the Pennsylvania Department of Conservation and Natural Resources, and local foundations. It is recommended that efforts to implement these natural systems greenway corridor strategies be funded at level between \$40,000 and \$80,000 per year. To reduce the local match costs, it is recommended that opportunities be explored to provide funding from various foundations, as well as state programs, such as PA DCNR, PA DCED, PA Fish and Boat Commission, and PA DCED, that can often be used to match one another's sources.

IMPLEMENTATION RESOURCES

Many tools are available to assist in the conservation of natural resources. Those tools are identified here, and, a brief description of each tool is provided. Being listed herein does not imply that the tool(s) be implemented. Rather, they are listed to provide a comprehensive list of tools that can be considered to assist in implementing the recommendations contained in this study.

ACQUISITION TOOLS

These mechanisms generally provide permanent protection of land and are preferred when establishing greenways.

Fee Simple Purchase

- Description: Direct purchase of land, at a price agreeable to the landowner, is done by a governmental or public agency or non-profit land trust organization. Land acquisition can be made at every level of government.
- Benefits: Acquiring fee simple title provides more permanent protection than other methods, such as zoning or subdivision requirements. Acquisition by non-profit groups partnering with communities imposes little or no cost and little administrative burden on local governments.
- Implementation: DCNR and DEP's Growing Greener Program has sources of funding to help communities and non-profit groups implement acquisition of land for inclusion in greenways.

Option / First Right of Refusal

- Description: A municipality or non-profit organization enters into an agreement with a landowner that, should the landowner decide to sell, gives the holder of the option the right to bid on the land before anyone else.
- Benefits: This technique gives the holder of the option time to assemble funds needed to purchase the property or to reach an agreement with the landowner through other means.
- Implementation: The option is negotiated and memorialized in a legal agreement. If the property is sold, the holder of the option may, but is not obligated to, submit a bid to the landowner.

Conservation Easements

- Description: A landowner voluntarily agrees to sell the right to develop his land in certain ways by granting an easement to another entity such as a land trust. The landowner retains title to the land and continues to pay taxes on it. The easement may or may not allow the grantee access to the land for certain purposes.
- Benefits: Establishment of conservation easements provides long-term protection, but is less costly than fee simple acquisition because the buyer receives less than full title to the land. Where the easement is held by a non-profit group, cost and burden on local government are minimized. Moreover, the landowners pay reduced real estate taxes, subject to terms of the conservation easement.
- Implementation: Generally, the buyer pays the landowner the difference between the value of the land that can be fully developed and the value of the land without development potential. The easement is recorded with the property deed and remains if the land is sold.

Through both state-wide and local chapter efforts, Audubon Pennsylvania (AP) promotes conservation through a variety of education programs. Among these programs are workshops aimed at promoting the establishment of conservation easements.

Although AP does not hold conservation easements, it promotes establishment of easements through other qualified land trust organizations (local examples are described later in this section). AP's efforts are important to Venango County because one Important Bird Areas (IBA) is located partially within the County's borders. IBAs contain areas of essential and sometimes vulnerable bird habitat. These areas are known as Important Bird Areas, or IBAs. In Venango County, the only IBA identified is the Oil Creek State Park IBA.

The protection of this area is of great interest to AP, and conservation efforts in these areas may attract the support of the organization in the form of landowner education. More information is available through the AP website, <http://pa.audubon.org>, or through the local chapter: Seneca Rocks Audubon Society, PO Box 148, Clarion, PA 16214, www.senecarocksaudubon.org/.

Agricultural Conservation Easements

- **Description:** A subset of conservation easements described above, these easements protect farms from development. Landowners voluntarily sell the rights to develop the farm to a government entity or land trust. The agency or organization usually pays them the difference between the value of the land for agricultural use and the value of the land for its "highest and best" use, which is generally residential or commercial development.
- **Benefits:** Conservation easements preserve land for agricultural use. They provide a financial benefit to farmers while conserving farmland that often provides wildlife habitat. Also, owners of land subject to conservation easements pay reduced real estate taxes.
- **Implementation:** County Agricultural Land Preservation Boards have primary responsibility for developing application procedures. They also establish priority for easement purchases based on a numerical ranking system. The ranking system is modeled on Pennsylvania Dept. of Agriculture (PDA) regulations that require consideration of soil quality, conservation practices, development pressure, and proximity to other preserved farmland and open space.

Forest Land Conservation Easements

- **Description:** These easements are a market driven tool used to preserve working forests, in the same way agricultural conservation easements protect working farmland.
- **Benefits:** Easements can be used to protect forests for present and future economic benefit, simultaneously preserving wildlife habitat; protecting watersheds; providing outdoor recreation opportunities; and promoting soil conservation. In addition, benefits to landowners include reduced property taxes. These easements are of great importance to the Commonwealth of Pennsylvania, as timber is one of the top sectors of the state's economy.
- **Implementation:** Some non-profit groups such as conservancies and land trusts provide financial support for purchasing easements from landowners. They also accept tax-deductible donations of easements.

The U.S. Forest Service's Forest Legacy Plan (FLP) aids in the identification and protection of environmentally-important forest lands threatened by conversion to non-forest uses. The FLP

provides funding to state governments to help purchase easements on private forestland. Eligible forest lands must be located in a designated Forest Legacy Area and must meet other specific eligibility requirements. The DCNR Bureau of Forestry, in cooperation with the State Forest Stewardship Committee (SFSC), is responsible for implementation of this program in Pennsylvania. For more information, visit www.dcnr.state.pa.us/forestry.

Transfer / Purchase of Development Rights

- **Description:** Transfer of Development Rights (TDR) is a tool that allows conservation and development to co-exist within a municipality or group of municipalities with joint zoning. TDR permits landowners in conservation target areas to transfer some or all of the development rights to their land (sending areas) to areas where growth is desired at higher densities than zoning allows (receiving areas). The landowners keep title to the land and the right to use it, but give up the right to develop it for other purposes. The buyer of development rights uses them to develop another parcel at greater density than would otherwise be permitted. With TDR, transfer of rights occurs at the time of development.
- **Purchase of Development Rights (PDR)** operates in a similar manner. However, with PDR, an entity buys the rights to develop land from the landowner. The landowner retains title and use of the land and receives tax benefits. A municipality can pass a bond issue to buy the rights and "bank" them. A developer may then purchase the development rights from the municipality when ready to develop an area with high density. The municipal bond financing is paid off over time by the purchase of development rights as development occurs.
- **Benefits:** The value of each development right is controlled by the open market, not the municipality. TDR is an equitable option for preserving open space and agricultural land, compensating the owner of the preserved land while guiding the growth of development by allowing increased density where existing infrastructure can support it.
- **PDR** provides an immediate return to the landowner, as he/she is compensated for the reduction in development potential of their land. At the same time, PDR supports the development district concept. PDR also streamlines the development process, since private sales and negotiations for development rights are eliminated. It allows a municipality to guide growth to places where it is desired.
- **Implementation:** In Pennsylvania, TDR can only be used to transfer development rights within a single municipality or among municipalities with a joint zoning ordinance. It is up to each municipality implementing TDR to set up a mechanism to accomplish the transfer.

REGULATORY TOOLS

Regulatory techniques can also be used to establish greenways. However, because they can always be amended or even abolished by local officials, they cannot be relied on for permanent protection of land. Nevertheless, they should not be overlooked when discussing long-term strategies for assembling a greenway network.

Open Space Zoning

- **Description:** This preserves a large amount of land for conservation uses while still allowing full-density development. In contrast to cluster zoning, where the emphasis is more often placed on providing active recreation areas, open space zoning is more suited for protecting farmland; forests; historic sites; or scenic views. Subdivisions are required to dedicate a significant portion of their unconstrained land to permanent open space uses. The open space is typically owned and managed (according to an approved management plan) by a homeowners' association. Other possible owners include land trusts or the municipality.
- **Benefits:** While a regulatory tool, open space zoning provides a means of permanent protection of undeveloped land while allowing full-density development. Ideally, the open space in each new subdivision will be planned to abut one another, forming an interconnected system of conservation land.
- **Implementation:** This technique is implemented through a municipal zoning ordinance. The number of dwellings permitted is based on the net acreage of buildable land and the allowable density in the property's zoning district. Easements are then placed in the open space to ensure that it will not be further subdivided or developed.

Growing Greener: Conservation by Design

Growing Greener: Conservation by Design is a collaborative program between the Natural Lands Trust, a non-profit conservancy located in Media, PA; the Pennsylvania Department of Conservation and Natural Resources; the Governor's Center for Local Government Services; DCED; and an advisory committee comprised of officials from state, local, and non-profit agencies and the private sector. The Governor's 1999 state-wide funding initiative shares the same *Growing Greener* name, but is a separate program funding natural resource protection and land preservation efforts across the Commonwealth.

In order to implement conservation, subdivision design, zoning, and subdivision ordinances are revised to focus not only on the development related issues (such as lot dimensions, street geometry, stormwater management, etc.) but to place equal emphasis on conserving a variety of environmental, cultural, historic, and scenic features. It is precisely those features that typically give a community its special character and are often destroyed by conventional development practices.

When local land use regulations require developers to design around special natural and cultural features, developers can become the municipality's greatest conservationists, at no cost to the community. To achieve this, several revisions must usually be made to the subdivision and zoning ordinances.

Subdivision ordinances must contain, at a minimum:

- Procedures that strongly encourage dialogue between the applicant and the municipality before detailed plans are engineered
- Standards for configuration and location of conservation lands
- A requirement for a context sensitive map, showing all natural and man-made features surrounding the site

- A requirement that a detailed site inventory for existing features, upon which to base decisions regarding the area, be protected
- Required site visit by planning commission staff accompanied by the developer, with the site inventory in hand
- A four-step design process in which conservation areas are determined first, before houses, streets, and lot lines are established

Revisions to the zoning ordinance create a menu of options for developers to choose from, relating to density to the provision of open space. The options offer density increases when greater open space is proposed and reduced density when less open space is proposed. In addition, the zoning ordinance needs to be made flexible to accommodate development in patterns that preserve natural resources.

Zoning ordinances must contain, at a minimum:

- The ability for the applicant to obtain full density, through a “by-right” (versus conditional use) approval process, but only when the conservation option is selected
- A requirement that protected lands in conservation subdivisions are comprised of at least 50% of the buildable ground, whenever the underlying density is one unit per acre or lower
- Strong disincentives to discourage “conventional” development, usually reducing the density by half
- Restrictive covenants that ensure the conservation lands are perpetually restricted from further development
- Open space location design standards

Successful communities employ a wide array of conservation planning techniques simultaneously over an extended period of time. Complementary tools, which a community should consider adding to its “toolbox” of techniques, include the purchase of development rights; donations of sales to conservancies; the transfer of development rights; and “land owner compacts” involving density shifts between contiguous parcels. Other techniques can be effective, but their potential for influencing the big picture is limited. The *Growing Greener: Conservation by Design* approach offers the greatest potential because it:

- Does not require public expenditure;
- Does not depend on land owner charity;
- Does not involve complicated regulations for shifting rights to other parcels; and
- Does not depend on the cooperation of two or more adjoining landowners to make it work.

Additional informational material describing *Growing Greener: Conservation by Design* concepts is available from the Natural Lands Trust, Hildacy Farm, 1031 Palmers Mill Road, Media, PA 19063, 610-353-5587, www.natlands.org.

Overlay Zoning Districts

- Description: An overlay zoning district applies additional regulations to an underlying zoning district or districts. The restrictions of the overlay district supplement and supersede (where there is a conflict) the provisions of the underlying district. Overlay districts have been used to conserve floodplains and other sensitive natural features.
- Benefits: Overlay zoning allows regulations to be tailored to specific conditions. Administration is similar to any other zoning district.

- Implementation: Provisions of a zoning district must apply uniformly to each class of uses or structures within the district. However, Section 605 (2) of the Municipal Planning Code authorizes additional classifications, potentially through overlay zoning, for "regulating, restricting, or prohibiting uses and structures at, along, or near...."
- (ii) Natural and artificial bodies of water.....
- (iii) Places of relatively steep slope or grade, or areas of hazardous geological or topographic features.....
- (vi) Places having unique historical, architectural, or patriotic interest or value.
- (vii) Floodplain areas,.....sanitary landfills, and other places having a special character or use affecting and affected by their surroundings."

Buffer Zones

- Description: Municipalities enact regulations requiring buffers of a prescribed width between incompatible uses, such as residential and commercial areas, or adjacent to sensitive resources, such as streams or drinking water supplies. This tool allows the municipality to limit or prohibit development within the buffer area.
- Benefits: Buffers can be used to protect large, linear corridors of valuable resources like stream and river banks, which are often included in greenways. They allow municipalities to protect areas of sensitive land without having to shoulder the expense of acquisition.
- Implementation: Requirements for buffers are enacted as part of a zoning ordinance or subdivision and land development ordinance. Buffer restrictions should be wide enough to protect the resource or shelter the less intensive use. However, care must be taken not to create buffers that are so wide that they will disproportionately reduce the value of land in the municipality. An amazingly successful example of a buffer zone is Falling Spring Greenway in Guilford Township, Franklin County. Successful implementation of a buffer zone around the Falling Spring Branch, a popular fishery, coupled with several stream restoration projects, saved a threatened natural resource. This ordinance, as well as an illustrated article detailing its success, are available in the appendices of this report.

Agricultural Protection Zoning

- Description: This zoning designates areas where farming is the primary land use and discourages other land uses in those areas.
- Benefits: Agricultural Protection Zoning stabilizes the agricultural land base by keeping large tracts of land relatively free of non-farm development. This reduces the likelihood of conflicts between farmers and non-farming neighbors. Maintaining unbroken masses of farmland ensures continued support for local agricultural service businesses.
- Implementation: Agricultural Protection Zoning is economically viable when coupled with tools such as Transfer of Development Rights or Purchase of Development Rights.

Mandatory Dedication Ordinance

- **Description:** Township officials require developers to dedicate a portion of the undeveloped land on a development parcel for open space preservation purposes. The amount of open space dedication is often reflective of the type, amount, and intensity of development to occur on the site.

Fees in-lieu-of dedication are required of the owner or developer as a substitute for dedication of land. Fees are usually calculated in dollars per lot, and referred to as "in-lieu fees." The municipality then uses these funds to purchase new park or conservation land.

- **Benefits:** Mandatory dedication ensures that open space will be preserved as a municipality develops. With careful planning by municipal officials, these areas of open space can be aligned to create greenway corridors. However, many municipalities prefer payment of in-lieu fees because they allow the municipality to combine funds from several developments and purchase large tracts of recreation or conservation land.

It is important to note that mandatory dedication ordinances can include specific clauses requiring the dedication of land that includes environmentally-sensitive features such as wetlands, floodplains, etc. Ordinances can also require negotiation with municipal officials so that other lands desired by the municipality can be identified for dedication.

- **Implementation:** Provisions requiring mandatory dedication or in-lieu fees can be added to municipal zoning ordinances by amendment. The Municipal Planning Code requires that "the land to be dedicated or the fees to be paid shall bear a reasonable relationship to the use of the park or recreational facilities [developed on that land] by future inhabitants of the development....". The municipality is also required to expend any fees collected within three years of payment by the owner / developer.

The Official Map

- ❖ **Description:** A municipality creates an "official map" that designates public or private land that has been identified as a current or future public need. This can be land for roads or other infrastructure, as well as open space for conservation or recreation. Making this map available to the public notifies landowners and developers about land that the municipality is planning to use for public purposes.
- ❖ **Benefits:** The Official Map is a very powerful tool for municipalities planning for conservation and recreation. It gives municipalities time to assemble funds to purchase identified lands through First Right of Refusal (described earlier in this section). Of importance in Venango County is the fact that a municipality is not required to enact ordinances to create and adopt an Official Map.
- ❖ **Implementation:** The Official Map does NOT result in taking of land, but simply gives the municipality right of first refusal to purchase the land or obtain an easement. The municipality has one year to make an offer to the landowner, should the property be made available for sale. After one year, the landowner can sell the property to any other interested buyer.

Municipalities wanting to establish a desired feature should only do so after they have identified lands needed for conservation or recreation through a comprehensive planning process. Such lands must be identified on a parcel-by-parcel basis, with greater detail than is given in this

greenways plan. If lands are to be reserved on an official map, the municipality should have a reasonable prospect of obtaining the funds necessary to purchase the property of interest.

The Official Map is a tool of great importance in Venango County because a municipality can implement an official map with or without a zoning ordinance.

OTHER RECOMMENDATIONS

The action plan also includes several other conservation, recreation, and transportation-based recommendations essential to maintaining the quality of life that defines Venango County. The following mechanisms are methods of land conservation or resource protection that do not involve acquisition of land or enactment of ordinances by a municipality, but are no less effective.

Agricultural Security Areas

- Description: A landowner or group of landowners, whose parcels together comprise at least 250 acres, may apply to their local government for designation as an Agricultural Security Area (ASA).

Although ASAs do not offer conservation-based protection, they help ensure continuation of agricultural practices, which are a large part of the quality of life in Venango County. This plan recommends that the County continue to accept applications for agricultural security areas and couple that effort with a strong conservation-based education program, showing farmers in ASAs the benefits of agricultural best management practices and natural resource conservation.

Agricultural Tax Incentives

- Description: Differential assessment laws direct local governments to assess agricultural land at its value for agriculture, rather than its full market value, which is usually higher. Differential assessment laws are enacted at the state level, but implemented locally.
- Benefits: The programs allow farmers to continue operating an agricultural operation in the face of development, thus helping ensure the economic viability of agriculture. These tax laws align agricultural property taxes with what it actually costs local governments to provide services to the land.
- Implementation: Landowners must apply to the County Assessment Office.

Clean and Green Program

- Description: Pennsylvania ACT 319 (also known as Clean and Green) provides real estate tax benefit to owners of agricultural or forest land by taxing that land on the basis of its "use value," rather than its true market value. This act provides preferential assessment to any individuals who agree to maintain their land solely devoted to one of the three following uses:
 - Agricultural Use: Land used for producing an agricultural commodity or devoted to (and qualifying for) payments or other compensation under a soil conservation program, under an agreement with a Federal government agency.
 - Agricultural Reserve: A non-commercial open space used for outdoor recreation or enjoyment of scenic or natural beauty, offering public use without fee or charge. Agricultural reserve land is the only use under the Clean and Green program that requires landowners to permit nondiscriminatory public access. This use is generally requested by landowners that

wish to maintain their land in a natural state – free of farming, timbering, or any other activities.

- Forest Reserve: 10 acres or more parcel of land stocked by forest trees that are capable of producing timber or other wood products. Forest reserve lands include any farmstead land on the same property parcel as the timber trees.
- Benefits: Clean and Green reduces property taxes for owners of farm, timber, or conservation land.
- Implementation: Landowners applying for the Clean and Green Program must have 10 or more acres of active agricultural or forest land, unless they gross at least \$2,000 annual income from the land.

Partnership with a Land Trust Organization

- Description: The regular acquisition of property rights (using several of the conservation tools mentioned previously in this section) for conservation defines an organization as a land trust. Land trusts are non-profit organizations focused on working cooperatively with landowners and organizing land acquisition projects that benefit both landowner and community. Nearly 100 land trusts operate in Pennsylvania.

Land trusts can be private charitable organizations, or in some cases governmental agencies, that vary greatly in size and conservation priorities. They may be staffed entirely by volunteers, concentrating efforts in a small area or municipality, or may be large, regional entities staffed by many professionals (i.e. the Western Pennsylvania Conservancy). Among the various possible focuses of land trusts are:

- Operating public recreation areas or nature preserves;
- Owning no property, but holding conservation easements for the protection of natural resources;
- Acquiring land that is to be turned over to governments for public parks or other recreation, such as State Game Lands;
- Focusing on protection of water resources, such as lakes, rivers, and streams;
- Preserving scenic views, wildlife habitat, or open space for public recreation;
- Promoting the preservation of productive farmland, forested areas, or hunting grounds; or
- Promoting smart land-use planning, environmental education, or trail development for transportation.
- Benefits: Conservation of open space in Pennsylvania is essential not only to the environment, but to the state's economy. Agriculture, timber production, eco-tourism, hunting, fishing, wildlife observation, and other outdoor recreation are all dependent on preservation and management of Pennsylvania's natural resources, upon which the State's economic success depends.

Because they are devoted to working directly with landowners, land trusts can dispel any fears about government "taking" of land. Their efforts can comply with community conservation interests, while spelling out benefits to the landowner, thus creating a "win-win" situation.

In addition, land trusts may have considerably more success than municipalities in attracting funding for acquisition projects. They sometimes qualify for federal, state, and local government funds available for conservation projects. Pennsylvania DCNR supports land trust acquisitions

with Keystone Fund and Environmental Stewardship Fund (Growing Greener) grants, which support 50% of the costs of priority acquisitions. Land acquisition projects were a main focus of the Growing Greener grant funding in 2006. Of further interest, the Pennsylvania Land Trust Association (PALTA) also offers a similar program with a newly-increased maximum \$6,000 reimbursement grant for conservation easements on natural areas and also for trail easements. (see www.conserveland.org/ceap).

- Implementation: To meet Venango County's conservation needs opportunities to work with existing land trusts should be explored.

Many of Pennsylvania's land conservation organizations are members of the *Pennsylvania Land Trust Association* (PALTA), whose mission is to increase the quality and pace of land conservation statewide, by strengthening conservation efforts; improving related government policy; and raising public awareness, while building positive relationships between land conservation organizations and other partners. The Allegheny Valley Conservancy is a current member of PALTA, and at the time of this report, the Conservancy was in the progress of gaining land trust accreditation through PALTA. Information on these and other land trusts is available at www.conserveland.org.

Continue to Promote Agricultural Best Management Practices

Pashek Associates recommends that the County Conservation District continue its work with farmers to promote and implement best management practices, thus protecting water quality in the County's streams. Agricultural runoff may cause siltation and may alter nutrient content of streams, adversely effecting aquatic ecosystems. Best management practices, such as stabilized cattle stream crossings, streambank fencing to limit livestock access to streams, and planting vegetative stream buffers may help to prevent excessive runoff from agricultural fields.

The Venango County Conservation District currently offers landowner education on agricultural best management practices and has helped landowners implement such practices throughout the County. In addition, the Western Pennsylvania Conservancy (WPC) provides outreach and implementation services for best management practices via the Pennsylvania Conservation Reserve Enhancement Program (CREP). CREP rewards agricultural producers and landowners for agreeing to install conservation practices on their land. More information is available at www.creppa.org and through the Venango County Conservation District (814-676-2832).

Caution must also be taken to preserve farm-related infrastructure, such as farm supply stores, etc. A regional example of preservation without proper planning is Montgomery County, Maryland. Agricultural preservation areas were concentrated in one area of the county only, while other areas were left open to development. Once land was developed in other portions of the county, farm-related infrastructure like supply businesses moved out of the county towards larger customer bases. The farms that remained protected in the county then experienced financial hardship due to lack of nearby support businesses like supply stores, machinery dealers, etc.

Pennsylvania Game Commission Cooperative Programs

Hunting is a part of life in Venango County. This is apparent during any drive through the County's countryside and in the County's abundance of State Game Lands. It is recommended that the County encourage its landowners in rural areas to make land available for public hunting via the *Cooperative Farm-Game Program* and *Cooperative Safety Zone Program*, administered by the Pennsylvania Game Commission (PAGC).

These programs benefit both sportsmen and farmers. They provide more accessible hunting grounds, support the implementation of sound land use practices associated with game species habitat, and foster a mutual respect between hunters and landowners. Landowners may also receive the following:

- increased law enforcement patrol during regular hunting seasons;
- food and cover seedlings attractive to game species;
- special preference in the commission's pheasant stocking program;
- informational and warning signage for property borders and for safety zones, which are located within 150 yards of occupied dwellings or other buildings;
- free advice on soil conservation and other farm-related land use practices; and
- cutting of tree roots and limbs from crop field borders to increase sunlight on crops and provide cover for small game species and other wildlife.

Cooperating property owners enrolled in the Safety Zone Program execute an agreement with the PAGC that may be terminated at any time with 60-days advanced written notice. Landowners in the Farm-Game Program execute an agreement giving the commission hunting rights to the property for a minimum of 5 years. As of 2003, over 21,000 such agreements were in place, spanning 59 Pennsylvania Counties and keeping almost 2.5 million acres open to public hunting. Further information is available from PAGC field officers, any of the 6 regional PAGC offices, through the Bureau of Land Management at the PAGC Harrisburg headquarters, or through the PAGC website: www.pgc.state.pa.us.

Land Trust Organizations

There are several land trust and conservation organizations whose geographical area includes Venango County. A query of the Pennsylvania Land Trust Association's database identifies the Allegheny Valley Conservancy, the Western Pennsylvania Conservancy, Conneaut Lake / French Creek Valley Conservancy as local land trust organizations. Additionally it also identifies the Western Pennsylvania Conservancy who's efforts focus primarily on those sites of regional and statewide significance. Other established organizations in the Region that may qualify as a land trust in Venango County include the Woodland Owners of Clarion - Allegheny Valley, the Pennsylvania Environmental Council, and the Oil Heritage Alliance.

The Oil Region Greenway and Open Space Coordinator, with support from the Venango County Regional Planning Commission, should begin a dialogue with each organization identified herein to determine how they can assist with implementation of the natural systems greenway corridors in Venango County.

County(ies)	Organization	Mission
Crawford Erie Mercer Venango	Conneaut Lake / French Creek Valley Conservancy P.O. Box 34 Meadville, PA 16335 814-337-4321 conserve@mdvl.net	To promote the environmental integrity of the French Creek watershed and its environs, and to advance the protection of natural resources in the watershed to the aesthetic, ecological, recreational, and economic benefit of the citizens of the area.
Clarion Crawford Venango	Allegheny Valley Trails Association Box 264 Franklin, PA 16323 814-432-4476, x121 avta@ficda.org	To acquire abandoned railways in the Allegheny River watershed and to rehabilitate them into multi-purpose, non-motorized recreational trails.
Clarion Crawford Lawrence Mercer Venango Warren	Western Pennsylvania Conservancy 800 Waterfront Drive Pittsburgh, PA 15222 412-586-2326 info@paconserve.org	Protects, conserves and restores land and water for the diversity of the region's plants, animals and their ecosystems. Through science-based strategies, collaboration, leadership and recognition of the relationship between humankind and nature, WPC achieves tangible conservation outcomes for present and future generations.
Forest Venango Warren	Allegheny Valley Conservancy P.O. Box 96 Franklin, PA 16323 814-432-2187 jaholden@csonline.net	To protect the water quality of the Allegheny river and French Creek watersheds; preserve open-space, scenic beauty, valuable and productive agriculture and forest land and historically significant areas in the watersheds; to enhance the quality of life for residents of the region; to promote land stewardship through public education and technical assistance.

POTENTIAL FUNDING SOURCES

Development of a greenways network can be costly and requires a long-term strategy to access a variety of federal, state, and private sector funding opportunities. Funding programs designed to conserve natural resources, develop recreational trails, and create transportation improvements are all potential sources of grants for implementation of the recommendations contained herein. Most require some form of local match, and sometimes one grant opportunity can be utilized as the 'local match' for another grant opportunity.

The following tables list many current funding sources that are available to assist in funding greenway efforts in the Northwest Region. Because these programs are constantly changing, these tables are a starting point. When seeking grant programs, applicants should check web sites of the funding organizations for an updated listing of grant programs and eligibility requirements.

Moreover, any funding strategy should leverage local resources as well. Private and non-profit foundations in the communities and region are important sources of funding that should not be overlooked when assembling funding strategies. In addition, efforts should be made to create public-private partnerships and to seek in-kind contributions from local businesses in the communities and the region.

State Public Agency Grant and Funding Opportunities

Program	Agency	Purpose	Website
Community Conservation Partnership Program	Department of Conservation and Natural Resources	greenways, trails, & parks, acquisition, planning, development, circuit rider	http://www.dcnr.state.pa.us/brc/grants/general02.aspx
Boating Facilities Grants	Pennsylvania Fish & Boat Commission	boating facilities	www.fish.state.pa.us/promo/grants/boat_fac/00boatfac.htm
Certified Local Government Grants	Pennsylvania Historic and Muesum Commission	cultural surveys / interpretation	www.artsnet.org/phmc/pdf/clg_app.pdf
Community Development Block Grant	Pennsylvania Department of Community Development	infrastructure / community facilities	www.newpa.com/programDetail.aspx?id=71
Community Revitalization Program	Pennsylvania Department of Community Development	quality of life	www.newpa.com/programDetail.aspx?id=72
Environmental Education Grants	Pennsylvania Department of Environmental Protection	Environmental Education	www.depweb.state.pa.us/enved/cwp/
Growing Greener Grants	Pennsylvania Department of Environmental Protection	conservation of resources	www.depweb.state.pa.us/growinggreener
Keystone Historic Preservation Grants	Pennsylvania Historic and Muesum Commission	preservation / restoration	www.artsnet.org/phmc/pdf/kph_app.pdf
Land Recycling Grants Program	Pennsylvania Department of Environmental Protection	remediation	www.depweb.state.pa.us/dep/site/detail.aspx?id=71
Land Use Planning & Technical Assistance Grants	Pennsylvania Department of Community Development	community planning	www.depweb.state.pa.us/dep/site/detail.aspx?id=72
Main Street Program	Pennsylvania Department of Community Development	economic growth / community	www.depweb.state.pa.us/dep/site/detail.aspx?id=79
Non-Point Source Management Section 319	Pennsylvania Department of Environmental Protection	watershed restoration	www.dep.state.pa.us/dep/deputate/
Pennsylvania Infrastructure Bank	Pennsylvania Department of Transportation	transportation projects	www.dot.state.pa.us/bureaus/PIB.nsf/homepagePIB?OpenForm
TE Hometown Streets & Safe Routes to Schools	Pennsylvania Department of Transportation	bike / ped improvements	http://www.dot.state.pa.us/pennndot/Bureaus/CPDM/Prod/Saferoute.nsf
Urban & Community Forestry Grants	Pennsylvania Department of Conservation & Natural Resources	planting of trees	www.dcnr.state.pa.us/forestry/pucfc/
Treevitalize	Pennsylvania Department of Conservation & Natural Resources	planting of trees	www.treevitalize.net
Pennsylvania Redevelopment Assistance Capital Improvements	Pennsylvania Department of Community Development	see program guidelines	www.budget.state.pa.us/budget/lib/budget/racp/appmat/applicationhandbook.pdf
Single Application Grants	Pennsylvania Department of Community Development	see program guidelines	https://www.esa.dced.state.pa.us/ESAW/
Coldwater Heritage Conservation Grant	Pennsylvania Trout Unlimited, PA DCNR, PA Fish & Boat Commission	conservation of coldwater streams	www.coldwaterheritage.org

Federal Public Agency Grant and Funding Opportunities

Program	Agency	Purpose	Website
Acres for America	National Fish & Wildlife Foundation	acquisition of property	www.nfwf.org/programs.cfm
Brownfields Redevelopment Initiative	General Services Administration	includes trails	http://bri/gda/gov/brownfields/home
Community Development Block Grant	U.S. Department of Housing	can include greenways	www.hud.gov/offices/cpd/communitydevelopment/programs/index.cfm
Congestion Mitigation & Air Quality Program	Federal Highway & Transportation Adminstration	includes trails	www.fwha.dot.gov/environment/cmaqpgs/index.htm
Economic Development Grants for Public Works	Economic Development Administration	trail development	www.cfda.gov/public/viewprog/asp?progid=167
Environmental Education Grants Program	U.S. Environmental Protection Agency	Environmental Education Projects	www.epa.gov/enviroed/grants.html
Federal Public Lands Highway Discretionary Grants	Federal Highway Adminstration	includes trails	www.fwha.dot.gov/tea21/factsheets/fedland.htm
General Matching Funds	National Fish & Wildlife Foundation	fish & wildlife conservation	www.nfwf.org/programs.cfm
Healthy People 2010 Community Grants Program	Federal Department of Health & Human Services	health and wellness	www.health.gov/healthypeople/impleneetation/
Keystone Initiative Grants	National Fish & Wildlife Foundation	habitat enhancement	www.nfwf.org/am/templateccfm?Section=Grants
Land & Water Conservation Fund Grants	National Park Service	trails and greenways	www.nps.gov/nrcr/programs/lwcf/
National Scenic Byway Program	Federal Highway Adminstration	bicycle and pedestrian facilities	www.byways.org/grants/index.html
North America Wetland Conservation Grants	U.S. Department of the Interior	wetland conservation	www.fws.gov/birdhabitat/grants/nawca/index.shtm
Recreational Trails Program	Federal Highway Adminstration	trails	www.fhwa.dot.gov/environment/rectrails/index.htm
Rivers, Trails, & Conservation Assistance Program	National Park Service	conservation of resources	www.nrcr.nps.gov/programs/rtca/ContactUs/cu_apply.html
Safe Schools / Healthy Students Initiative	Office of Juvenile Justice, Department of Education	promote heathly childhood development	www.ojjdp.ncjrs.org/grants/safeschool/content.html
Safe, Accountable, Flexible, Efficent, Transportation Act	Federal Highway Adminstration	bicycle & pedestrian improvements	www.fhwa.dot.gov/safetealu/index.htm
Save America's Treasures Historic Preservation Fund	National Park Service & Arts	preservation / conservation	www.saveameericastreasures.org/funding.htm
Sustainable Development Challenge Grants	U.S. Environmental Protection Agency	sustainable community projects	www.epa.gov/ecocommunity/sdcg/
Transportation & Community & System Pilot Program	Federal Highway Adminstration	planning & implementation of trails	www.fwha.dot.gov/tcsp/
Transportation Enhancements	Federal Highway Adminstration	trails & bike / ped facilities	www.enhancements.org/

Federal Public Agency Grant and Funding Opportunities

Program	Agency	Purpose	Website
Urban Park and Recovery Program	National Park Service	parks	www.ncrc.nps.gov/uparr/
Value Added Producers Grants	USDA Rural Development	market value added ag products	www.rurdev.usda.gov/GA/vadg.htm
Water Quality Research Grants	U.S. Department of Agriculture	water quality impairment	www.epa.gov/smarthgrowth/topics/water_quality_funding.htm
Wetlands Reserve Program	Natural Resource Conservation Service	restore & protect wetlands	www.nrcs.usda.gov/programs/WRP/
Wildlife Habitat Incentives Program	Natural Resource Conservation Service	develop & improve wildlife habitat	www.nrcs.usda.gov/programs/whip/

State Foundation Grant and Funding Opportunities

Program	Purpose	Website
Alcoa Foundation	economic development & quality of life	www.alcoa.com/global/en/community/foundation/overview.asp/
Asland Oil Foundation		www.ashland.com/commitments/contributions.asp/
Bayer Foundation		www.bayer.com/en/bayer-foundations.aspx/
Bozzone Family Foundation	quality of life	311 Hillcrest Drive, New Kensington, PA 15068-2318
Bridge Builders Foundation		www.bridgebuildersfoundation.org/aboutus/index.htm/
Deluxe Corporation		www.deluxe.com/dlxab/deluxe-foundation.jsp/
Dominion Foundation	economic development & environment	www.dom.com/about/community/foundation/index.jsp/
Ganassi Foundation		100 RIDC PLZ, Pittsburgh, PA 15238
Giant Eagle Foundation		101 Kappa Drive, Pittsburgh, PA 15238
H.J. Heinz Foundation		www.heinz.com/foundation.aspx/
Heinz Endowments	Environment	www.heinz.org/
Highmark Foundation		www.highmark.com/hmk2/community/hmfoundation/index.shtml/
Hillman Foundation	quality of life	www.hillmanfdn.org/
Hunt Foundation	focus on good of the region	www.rahuntfdn.org/
Juliet Lea Hillman Simonds Foundation		330 Grant Street, Suite 200, Pittsburgh, PA 15219
Katherine Mabis McKenna Foundation	environment	P.O. Box 186, Latrobe, PA 15650
Massey Charitable Trust		1370 Washington Pike, Suite 306, Bridgeville, PA 15017-2839
McCune Foundation	community development	www.mccune.org/
Millstein Charitable Foundation		P.O. Box K, Youngwood, PA 15697

State Foundation Grant and Funding Opportunities

Program	Purpose	Website
Milton G. Hulme Charitable Trust		1146 Old Freeport Road, Pittsburgh, PA 15238
Mine Safety Appliances Company Charitable Trust		www.msanorthamerica.com/communityrelations.html/
National City Bank Foundation		www.nationalcity.com/about-us/community/community-relations/pages/charitable-giving.asp
Pennsylvania Snowmobile Association Mini-grant Program	motorized trails	www.pasnow.org/PSSA%20Trail%20Grant%20Package.prn.pdf
Pew Charitable Trusts	environment & community development	www.pewtrusts.org/
Pittsburgh Foundation		www.pittsburghfoundation.org/
PNC Bank Foundation		https://www.pnc.com/webapp/unsec/ProductsAndService.do?siteArea=/PNC/Home/About+PNC/Our+Organization/Community+Involvement/PNC+Foundation/PNC+Foundation+Grant+Program
PPG Industries Foundation		http://corporateportal.ppg.com/PPG/PPGIndustriesFoundation/
Richard King Mellon Foundation	environment	http://foundationcenter.org/grantmaker/rkmellon/
Rockwell International Corporation Trust Fund		www.rockwellautomation.com/about_us/neighbor/giving.html/
Snee-Reinhardt Charitable Foundation	education & environment	www.snee-reinhardt.org/
Stackpole Hall Foundation		44 St. Marys Street, St. Mary's, PA 15857
The Bank of New York Mellon		One Mellon Center, Room 1830, Pittsburgh, PA 15258
United States Steel Foundation		www.uss.com/corp/ussfoundation/
W. Dale Brougher Foundation	conservation, ecology, history, & arts	1200 Country Club Road, York, PA 17403
Washington Federal Charitable Trust		www.washfed.com/charity.htm/
Westinghouse Foundation	quality of life	www.westinghouse.com/charitablegiving/giving.htm/

National Foundation Grant and Funding Opportunities

Program	Purpose	Website
American Conservation Association	conservation, river protection & wildlife	1200 New York Avenue, N.W., Suite 400, Washington, D.C. 20005
American Express Philanthropic Program	historic & natural assets	http://home3.americanexpress.com/corp/csr.asp/
AmeriCorp's National Civilian Community Conservation Corps	community improvements / trail building	www.americorps.org/about/programs/nccc.asp/
Andrew W. Mellon Foundation	conservation	www.mellon.org/
Art & Community Landscapes	community landscapes	www.nefa.org/grantprog/acl/acl_grant_app.html/
Bankamerica Foundation	conservation,, parks, fisheries, education	www.bankofamerica.com/foundation/
Bikes Belong Grant Program	bike improvements	www.bikesbelong.org/grants/
Caterpillar Foundation	history & environment	www.cat.com/cda/layout?m=39201&x=7
Chrysler Corporation Foundation	health & community affairs	www.thechryslerfoundation.com/
Coca-Cola Foundation	community development	www.thecoca-colacompany.com/citizenship/foundation_coke.html/
Compton Foundation	conservation	www.comptonfoundation.org/
Davis and Lucille Packard Foundation		www.packard.org/
Exxon Mobil Foundation	environment & education	http://hoe.exxonmobil.com/Corporate/community.aspx
Fish America Foundation	fish & water resources enhancement	www.asafishing.org/content/conservation/fishamerica/
Ford Motor Company Foundation	community development	www.ford.com/our-values/ford-fund-community-service/
Gannett Foundation		www.gannettfoundation.org/
General Mills Corporation	history & environment	www.generalmills.com.corporate.committment/foundation.aspx/
General Motors Foundation		www.gm.com/corporate/responsibility/community/
Harry C. Trexler Trust		33 South Seventh Street, Room 205, Allentown, PA 18101
J.C.Penny		www.jcpenny.net/company/commrel/index.htm/
John D. and Catherine MacArthur Foundation		www.macfound.org/
John S. and James L. Knight Foundation		www.knightfoundation.org/

National Foundation Grant and Funding Opportunities

Program	Purpose	Website
Kodak American Greenways Awards Program	greenways	www.grants.conservationfund.org/tcf/public/viewAwards.action/
Kresge Foundation	challenge grants	www.kresge.org/
L.L. Bean, Inc.		www.llbean.com/customerservice/aboutLLBean/charitable_giving.html/
National Fish and Wildlife Foundation		www.nfwf.org/
New-Land Foundation	environment	114 Avenue of the Americas, 46th Floor, New York, New York, 10036
Norcross Wildlife Foundation	land & habitat conservation	www.norcrossws.org/
Oracle Corporate Giving Program	can include greenways	www.oracle.com/corporate/giving/community/index.html?giving.html
Pepsico Foundation		www.pepsico.com/PEP_citizenship/Contributions/GrantGuidelines/index.cfm/
Polaris 'T.R.A.I.L.S.' Grant Program	motorized trails	www.pi54.com/ATV/PDFs/TRAILSGrantAppForm.pdf
Private Foundation	National	www.tourismcaresfortomorrow.org/
Proctor Gamble Foundation		www.pg.com/company/our_committment/community/jhtml/
Recreational Equipment Company		www.rei.com/reigives/
Robert Woods Johnson Foundation	health & physical activity	www.rwjf.org/
Rockefeller Family Fund	environment	www.rffund.org/
Sony Corporation of America Foundation		www.sony.com/SCA/philanthropy/guidelines.shtml/
Surdna Foundation		www.surdna.org/
Texaco Foundation	environment	www.chveron.com/globalissues/economiccommunitydevelopment/
The Global Relief Heritage Forest Program	tree seedlings on public lands	www.americanforests.org/global_refief/grants/
The Nathan Cummings Foundation	conservation	www.nathancummings.org/
Turner Foundation	wateshed protection	www.turnerfoundation.org/
W.K. Kellogg Foundation	community development	www.wkkf.org/
Wallace Reader's Digest Funds	education	www.wallacefoundation.org/

National Foundation Grant and Funding Opportunities

Program	Purpose	Website
Walmart Foundation		www.walmartstores.com/community/
William Penn Foundation	environment	www.wpennfdn.org/
Yamaha OHV G.R.A.N.T. Initiative	motorized trails	www.yamaha-motor.com/outdoor/OHV_Grants/OHVGRANTS_%20Guidlines_Application.pdf

Appendix

Inventory and Analysis Maps

Natural Infrastructure Inventory Map

Integrated List of Non-Attaining Streams

Ecological Infrastructure Inventory Map

Recreation Opportunities Map

Cultural & Historic Resources Map

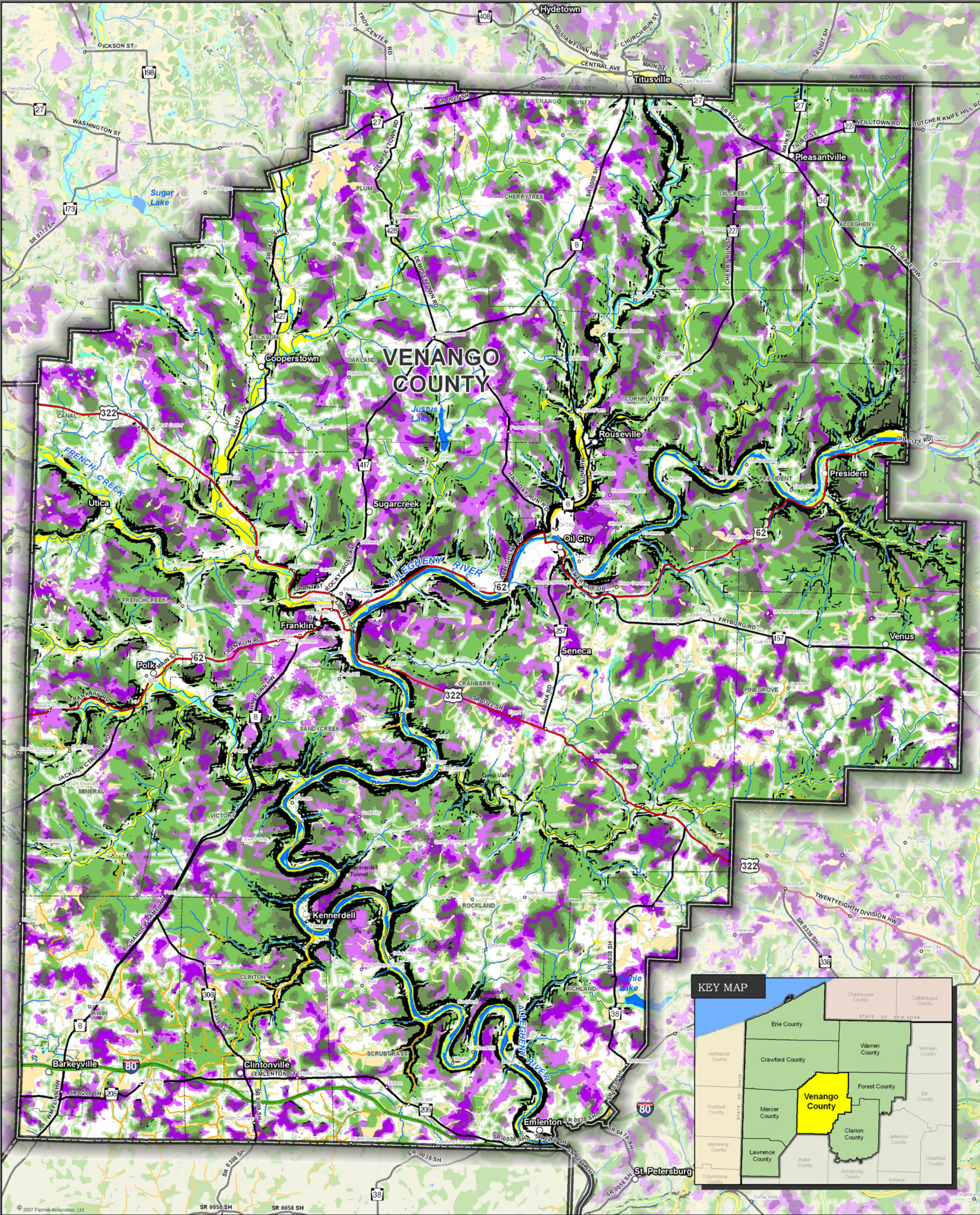
Population Density Map

Natural Systems Greenways Plan

Recreation and Transportation Greenways Plan

Northwest Pennsylvania Greenways Plan

Clarion County | Crawford County | Erie County | Forest County | Lawrence County | Mercer County | Venango County | Warren County



LEGEND

- County Boundary
- Municipal Boundary
- Lake / Reservoir
- River
- Stream
- Interstate
- PA State Route
- US Highway

Sensitive Environmental Features

- Floodplain
FEMA - 100 Year Floodplain
- Wetland
National Wetland Inventory
- Hydric Soils
NRCS Soils - County Hydric List
- Interior Forest Patches
Pennsylvania Natural Heritage Program
- Impaired Streams - DEP Streams 305(b)
- Forest Blocks
Pennsylvania Natural Heritage Program
- Slope > 25%
USGS Digital Elevation Model
- Topographic Position Index
Jenness, J. 2005. Topographic Position Index (tpi_jen.avv) extension for ArcView 3.x, v. 1.3a. Jenness Enterprises. Available at: <http://www.jennessent.com/arcviewtpi.htm>
- Ridge
- Upper Slope

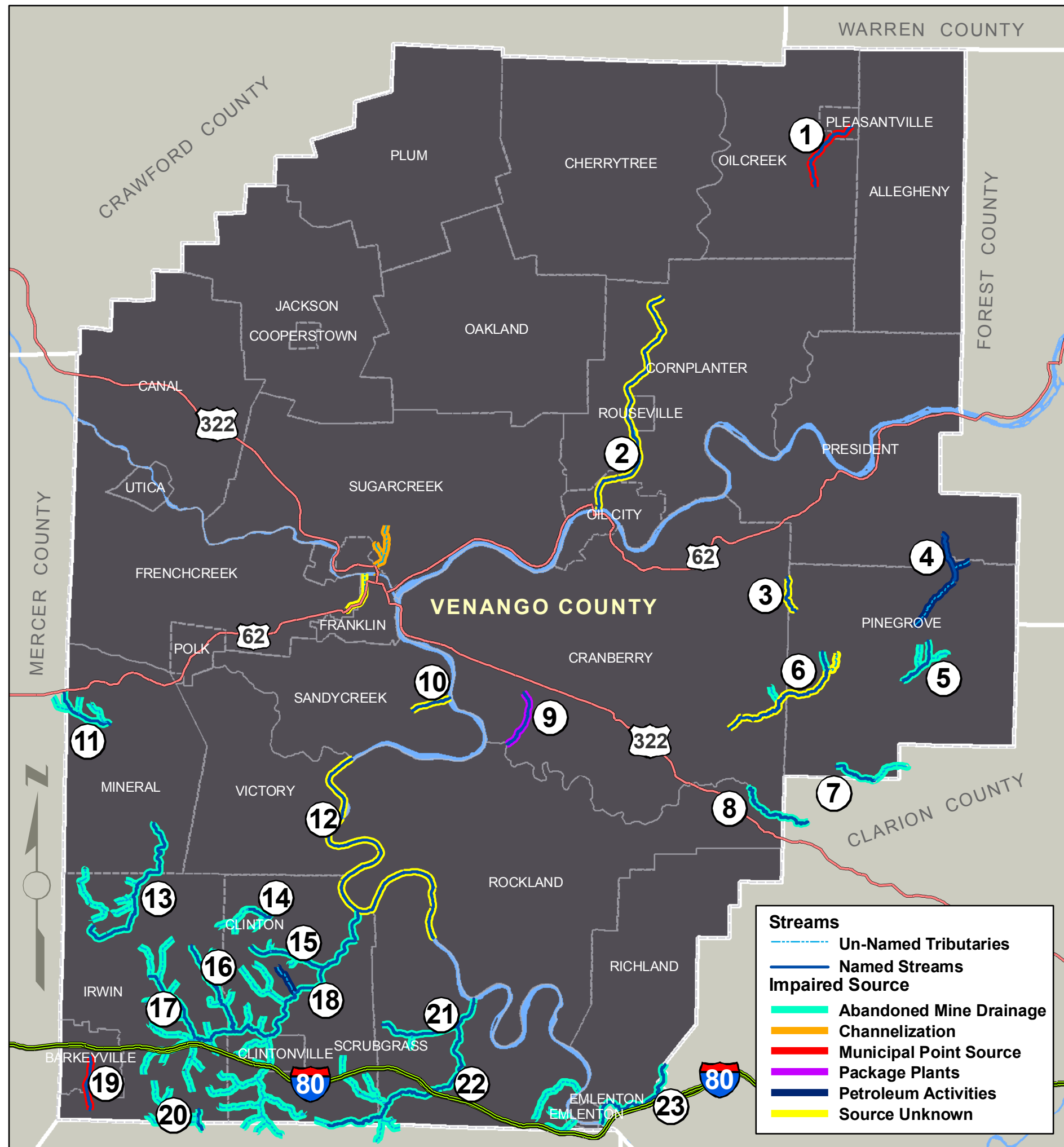
Data Source:
ESRI 2005 Street Map USA Data
US Geological Survey (USGS)
Pennsylvania Spatial Data Access (PASDA)
Pennsylvania Department of Transportation (PennDOT)
Department of Conservation and Natural Resources (DCNR)
Western Pennsylvania Conservancy (WPC)
Federal Emergency Management Agency (FEMA)
US Army Corps of Engineers - National Wetland Inventory (NWI)
Natural Resources Conservation Service (NRCS) - Soil Data Mart
Pennsylvania Department of Environmental Protection (DEP)

Pashek Associates makes no claims to the accuracy of this data.

Projection: State Plane - NAD 1983
Pennsylvania North: Feet

2 0 2
Miles

PASHEK ASSOCIATES
a pennsylvania corporation



VENANGO COUNTY, PENNSYLVANIA

303(d) Integrated List of Non-Attaining Streams 2008

Named Streams NonAttaining

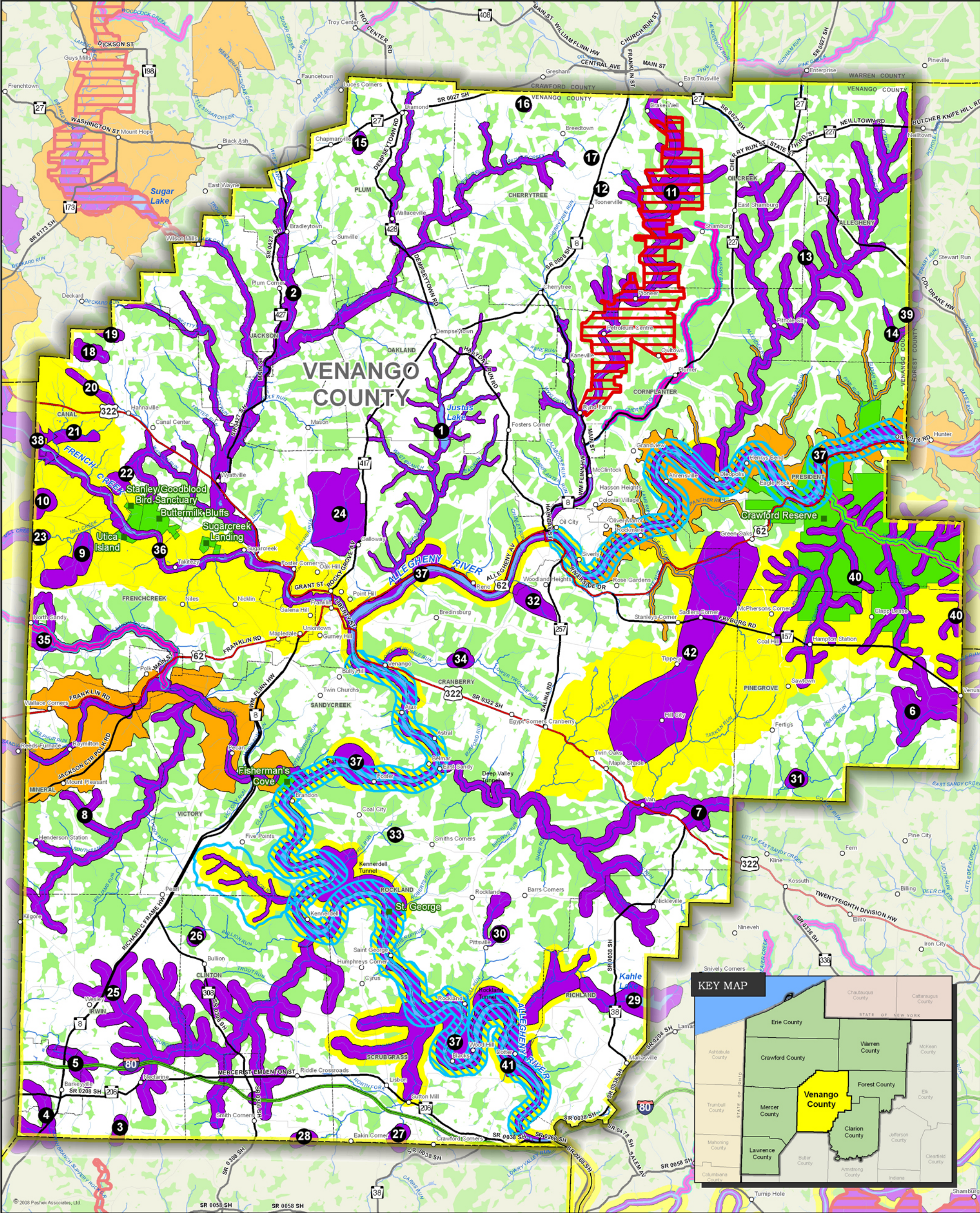
- | | |
|---------------------------|------------------------------------|
| ① West Pithole Creek | ⑬ Williams Run |
| ② Oil Creek | ⑭ Bullion Run |
| ③ Wolf Branch | ⑮ Trout Run |
| ④ Reese Run | ⑯ Glimore Run |
| ⑤ Prairie Run | ⑰ Scrubgrass Creek |
| ⑥ Tarkiln Run | ⑱ Scrubgrass Creek |
| ⑦ Cogley Run | ⑲ North Branch Slippery Rock Creek |
| ⑧ Little East Sandy Creek | ⑳ Blacks Creek |
| ⑨ Burford Run | ㉑ Lockard Run |
| ⑩ Ajax Run | ㉒ Little Scrubgrass Creek |
| ⑪ Sulphur Run | ㉓ Richey Run |
| ⑫ Allegheny River | |

DATA SOURCE: DEP IntegratedNonAttainingStreams

This layer shows only non-attaining segments of the Integrated List. The Streams Integrated List represents stream assessments in an integrated format for the Clean Water Act Section 305(b) reporting and Section 303(d) listing. Streams are bodies of flowing surface water that collectively form a network that drains a catchment or basin. PA DEP protects 4 stream water uses: aquatic life, fish consumption, potable water supply, and recreation. The 305(b) layers represents stream segments that have been evaluated for attainment of those uses. If a stream segment is not attaining any one of its 4 uses, it is considered impaired.

Northwest Pennsylvania Greenways Plan

Clarion County | Crawford County | Erie County | Forest County | Lawrence County | Mercer County | Venango County | Warren County



Northwest PA Greenways Plan
Venango County Natural Heritage Inventory

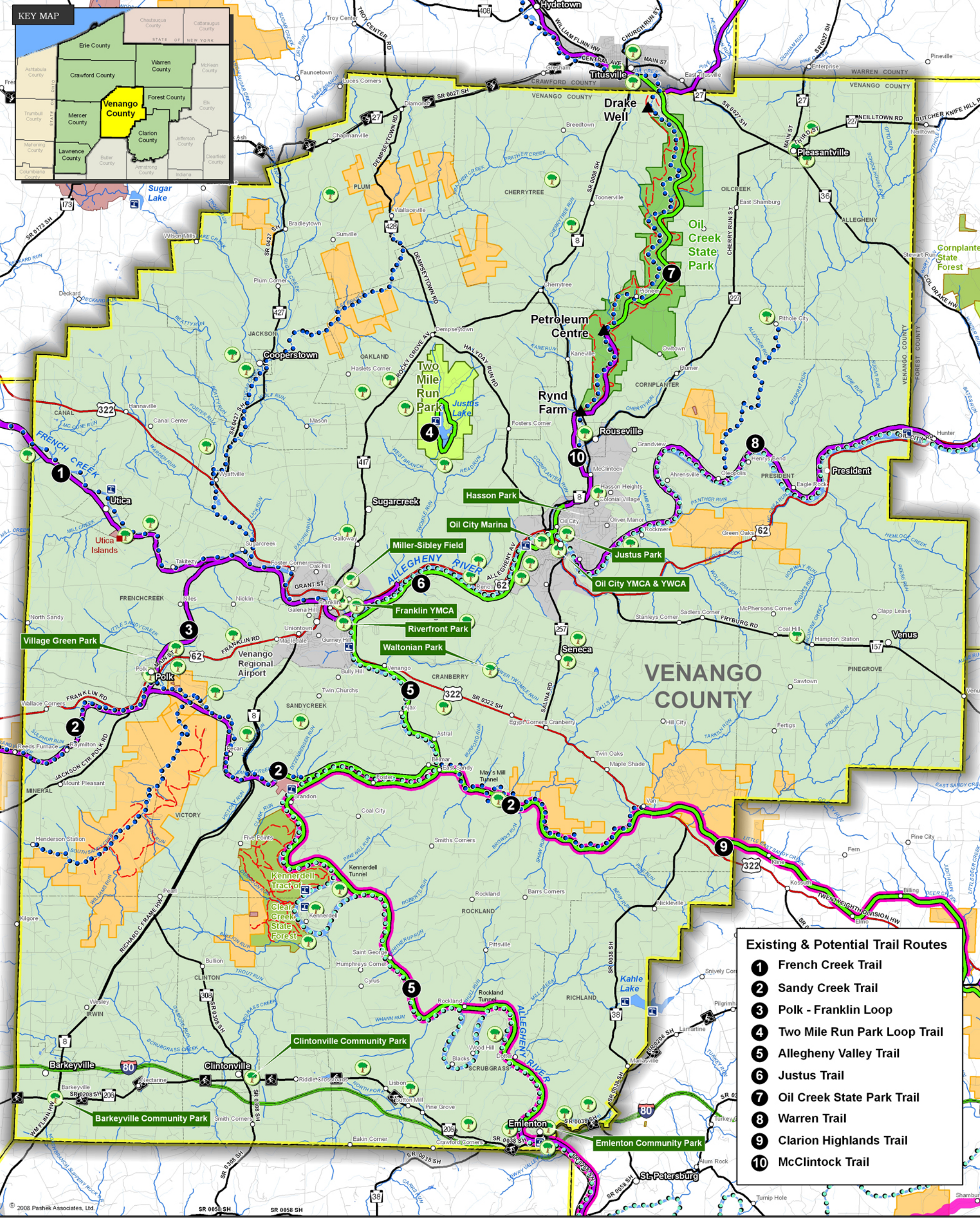
NHI #	NHI Name	Description
1	Two Mile Run	The creek and reservoir support an animal species of concern
2	Sugar Creek Drainage	Sugar Creek and its tributaries provide high quality streams for rare invertebrates and animals, with potential for additional rare plants and animals
3	North Branch Slippery Rock Creek Wetlands--East	Wetlands with potential for rare plants and animals
4	North Branch Slippery Rock Creek Wetlands	Potential for unique natural communities and rare plants
5	East Branch Wolf Creek Wetlands	Potential natural communities and rare animals
6	Powell Corners Wetlands	Beaver meadows and other wet habitats provide potential habitat for plant and animal species of concern
7	East Sandy Creek	The uplands surrounding the creek provide habitat for a rare plant species
8	South Sandy Creek	Creek, wetlands, and steep slopes are potential habitat for rare plants, animals, and natural communities
9	Mill Creek Vernal Pools	Potential vernal pool community
10	Irwin Vernal Pools	Potential vernal pool or wetland community
11	Oil Creek Ravines	Oil Creek and its banks provide habitat for rare plants and animals
12	Jameson Corners Seepage Swamp	Seepage swamp with potential for supporting rare plants and animals
13	Pithole Creek	Well forested watershed provides potential habitat for rare plants and animals
14	Stewart Run Swamps	Beaver meadows and swamps provide potential habitat for rare plants and animals
15	Diamond Wet Meadow	Wet meadow with potential habitat for rare plants and animals
16	Titusville Airport Wet Forest	Palustrine forest with potential for rare plants
17	Breedtown Wetlands	Wetland habitats with potential for rare plants and animals
18	Powdermill Run Wet Meadows	Beaver ponds and other wet meadows provide potential habitat for rare plants and animals
19	County Line Wetlands	Palustrine forest and wet openings provide potential habitat for rare plants and animals
20	McCune Run Marshes	Marsh habitats with potential for rare plants and animals
21	McCune Run Wetlands	Open and forested wetlands with potential for rare plants and animals
22	Utica Ponds	Potential vernal pond or wetland community
23	Mill Creek Wetlands	Wetland habitats with potential for rare plants and animals
24	Patchel Run Tributary	Relatively intact riparian forests provide potential habitat for rare plant and animal species
25	Scrubgrass Creek Ravine and Wetlands	Hemlock ravines and upper wet meadows with potential for rare plants, animals, and natural communities
26	Bullion Run wetlands	Wetlands with potential for rare plants and animals
27	South Fork Little Scrubgrass Creek	Riparian forests and wet meadows provide potential habitat for rare plants and animals
28	Little Scrubgrass Creek Wetlands	Wetlands with potential for rare plants and animals
29	Kahle Lake	Forested ravines around the lake support a plant species of concern
30	Shull Run Meadows	Beaver marshes and wet meadows provide potential habitat for rare plants and animals
31	East Sandy Creek Floodplain	Grassy openings along the creek provide potential habitat for a plant species of concern
32	Woodland Heights	A rare plant species is found within these woodlands
33	Pine Hill Cemetery	A rare plant species is found in meadows at this site
34	Lower Twomile Run	A shrub swamp and pipeline openings provide habitat for a rare plant species

Northwest PA Greenways Plan
Venango County Natural Heritage Inventory

NHI #	NHI Name	Description
35	Sandy Creek	The creek and floodplain supports several animal species of concern with potential for additional natural communities and rare plants and animals throughout
36	French Creek	Riverine community supporting numerous rare animal species
37	Allegheny River, Venango County	The Allegheny River and its floodplain supports critical populations of numerous species of rare animals and plants
38	French Creek BDA new	Riverine community supporting many animal species of special concern
39	Cashup Road	Habitat for American Columbo, a plant species of special concern.
40	Hemlock Creek	An exceptional value stream with potential for rare plants and animals
41	Allegheny River	The Allegheny River is known to host several species of rare plants and animals
42	Tipperry Meadows	Halls Run and Tarkiln Run watersheds support an extensive population of a rare animal species and many wetlands within the watersheds provide potential habitat for rare plant species

Northwest Pennsylvania Greenways Plan

Clarion County | Crawford County | Erie County | Forest County | Lawrence County | Mercer County | Venango County | Warren County



- Existing & Potential Trail Routes**
- 1 French Creek Trail
 - 2 Sandy Creek Trail
 - 3 Polk - Franklin Loop
 - 4 Two Mile Run Park Loop Trail
 - 5 Allegheny Valley Trail
 - 6 Justus Trail
 - 7 Oil Creek State Park Trail
 - 8 Warren Trail
 - 9 Clarion Highlands Trail
 - 10 McClintock Trail

LEGEND

- County Boundary
- Municipal Boundary
- Urban Areas
- Lake / Reservoir
- River
- Interstate
- PA State Route
- US Highway
- Active Railroad

DCNR Managed Land

- State Park
- County & Local Parks
- State Game Land
- Allegheny National Forest
- Other Managed Land
- PA Fish & Boat Designated Water Trail
- PA Canoeable Streams

Point of Interest

- Existing & Proposed Trails
- Existing Trail
- Potential Trail
- Existing North Country Trail
- State Forest, Park, Game Land Trails
- Bicycle PA Route

PFBC Access Points

Data Source:
ESRI 2005 Street Map USA Data
US Geologic Survey (USGS)
Pennsylvania Spatial Data Access (PASDA)
Pennsylvania Department of Transportation (PennDOT)

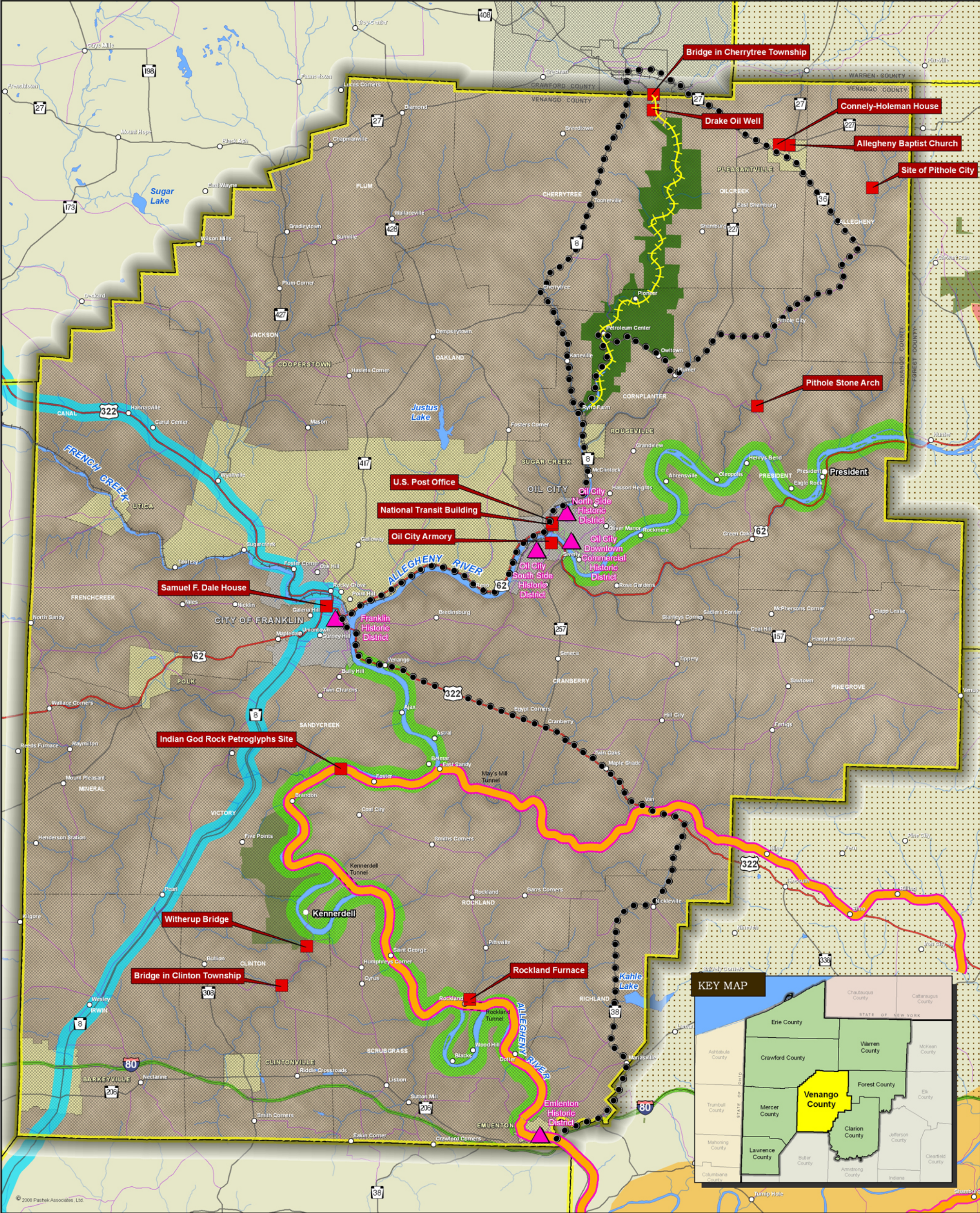
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Pennsylvania North: Feet

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Miles

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Northwest Pennsylvania Greenways Plan

Clarion County | Crawford County | Erie County | Forest County | Lawrence County | Mercer County | Venango County | Warren County



LEGEND

- County Boundary
- Borough
- City
- Lake / Reservoir
- Major Stream or River
- Interstate
- PA State Route
- US Highway
- Active Rail Lines

Cultural & Historic Resources

- North Country National Scenic Trail
- Wild and Scenic River
- Washington's Trail
- Oil Creek & Titusville Railroad
- Properties Oil Heritage Route
- National Register of Historic Places
- Historic District
- Historic Site
- Lumber Heritage Region
- Oil Heritage Region
- Rivers of Steel Heritage Area
- Pennsylvania Wilds
- State Park Land
- State Forest Land

Data Source:

ESRI 2005 Street Map USA Data
US Geologic Survey (USGS)
Pennsylvania Spatial Data Access (PASDA)
Pennsylvania Department of Transportation (PennDOT)
Department of Conservation and Natural Resources (DCNR)
Western Pennsylvania Conservancy (WPC)
Federal Emergency Management Agency (FEMA)
US Army Corps of Engineers - National Wetland Inventory (NWI)
Natural Resources Conservation Service (NRCS) - Soil Data Mart
Pennsylvania Department of Environmental Protection (DEP)

Pashek Associates makes no claims to the accuracy of this data.

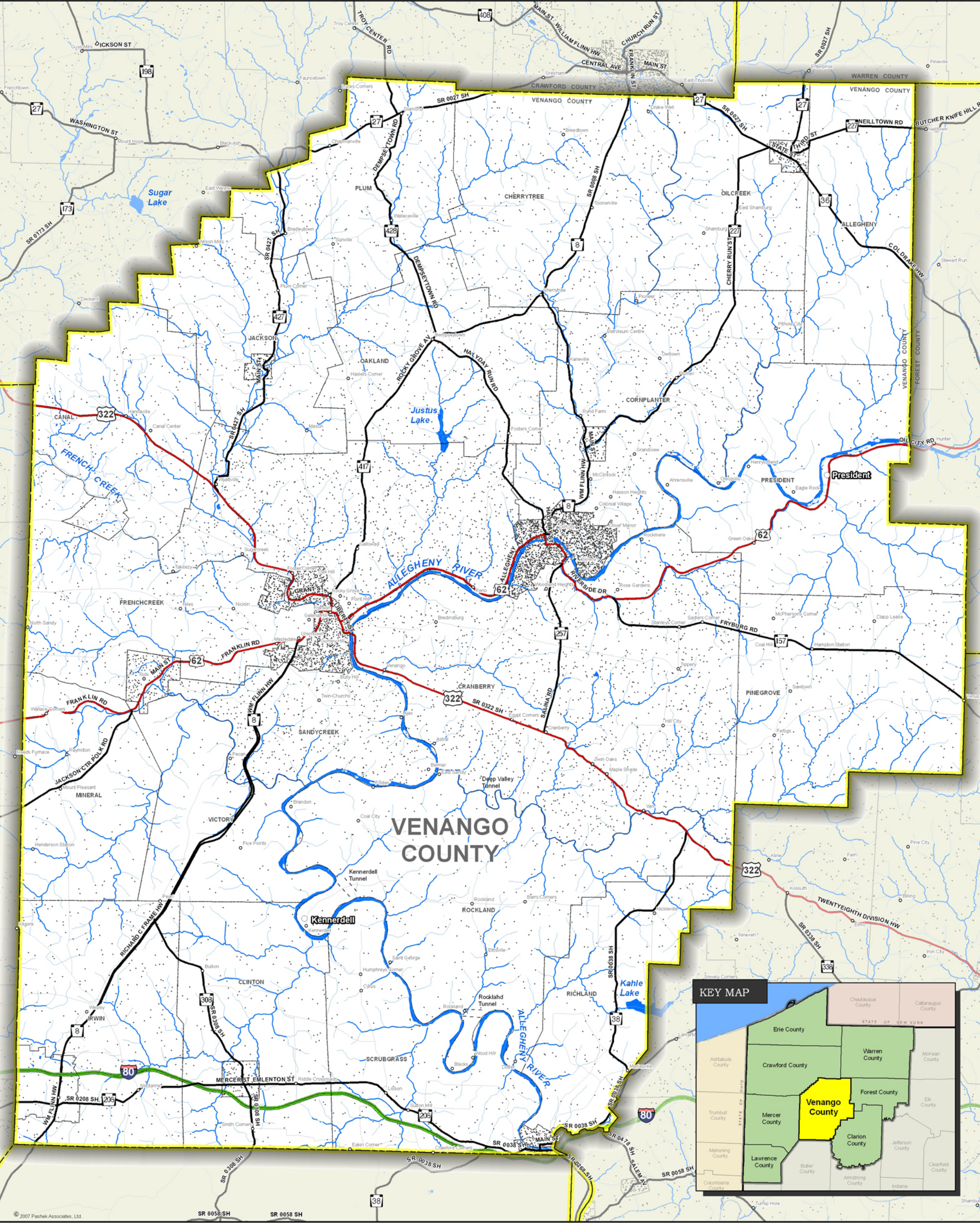
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Pennsylvania North: Feet

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Miles

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Northwest Pennsylvania Greenways Plan

Clarion County | Crawford County | Erie County | Forest County | Lawrence County | Mercer County | Venango County | Warren County



LEGEND

State Boundary

County Boundary

Lake / Reservoir

River

Stream

Interstate

PA State Route

US Highway

Population Density

1 dot = 5 people

Based on 2006 Population Estimates from the U.S. Census Bureau
www.census.gov

Data Source:

ESRI 2005 Street Map USA Data
US Geologic Survey (USGS)
Pennsylvania Spatial Data Access (PASDA)
Pennsylvania Department of Transportation (PennDOT)
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Projection: State Plane - NAD 1983
Pennsylvania North: Feet

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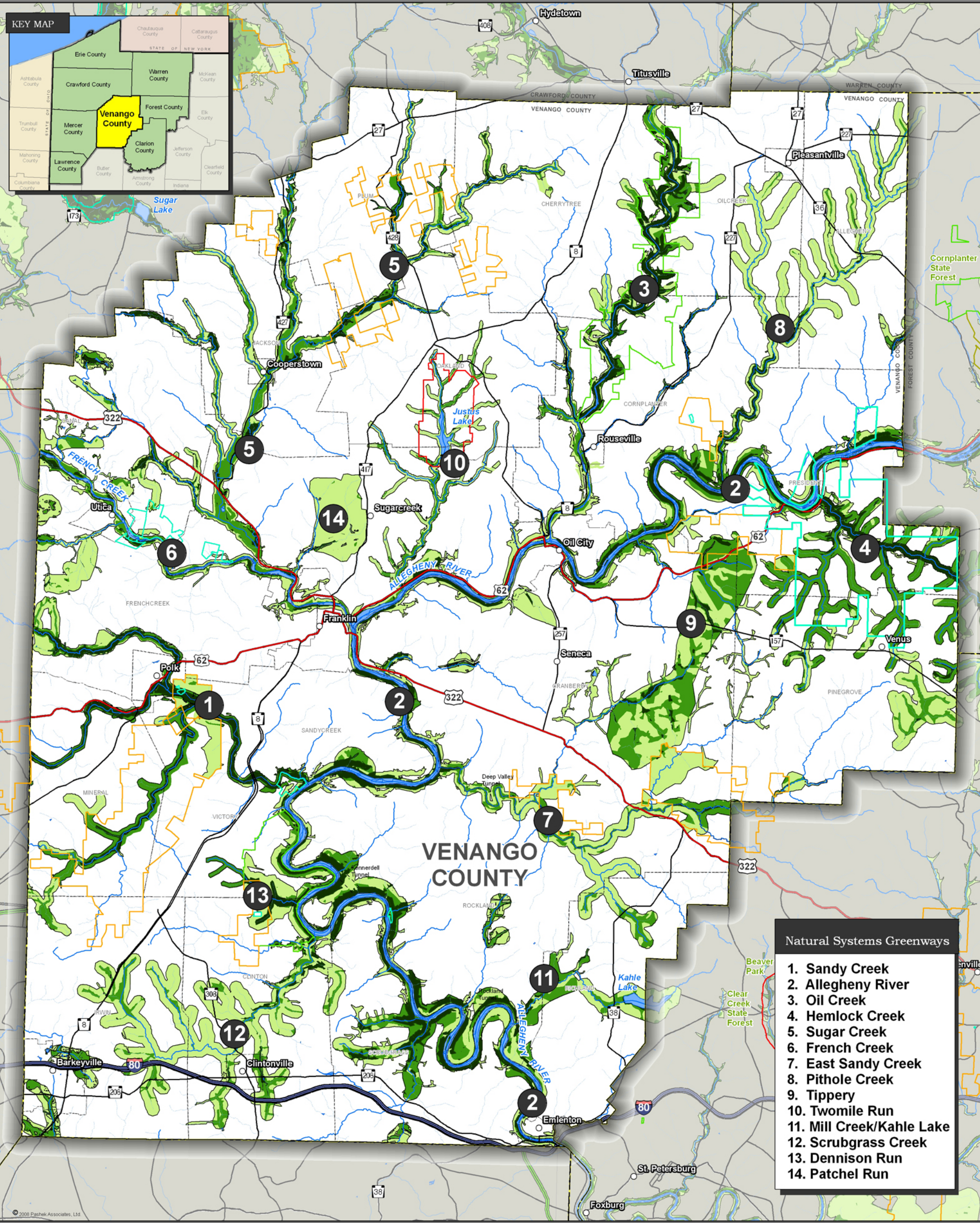
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Population Density

Venango County

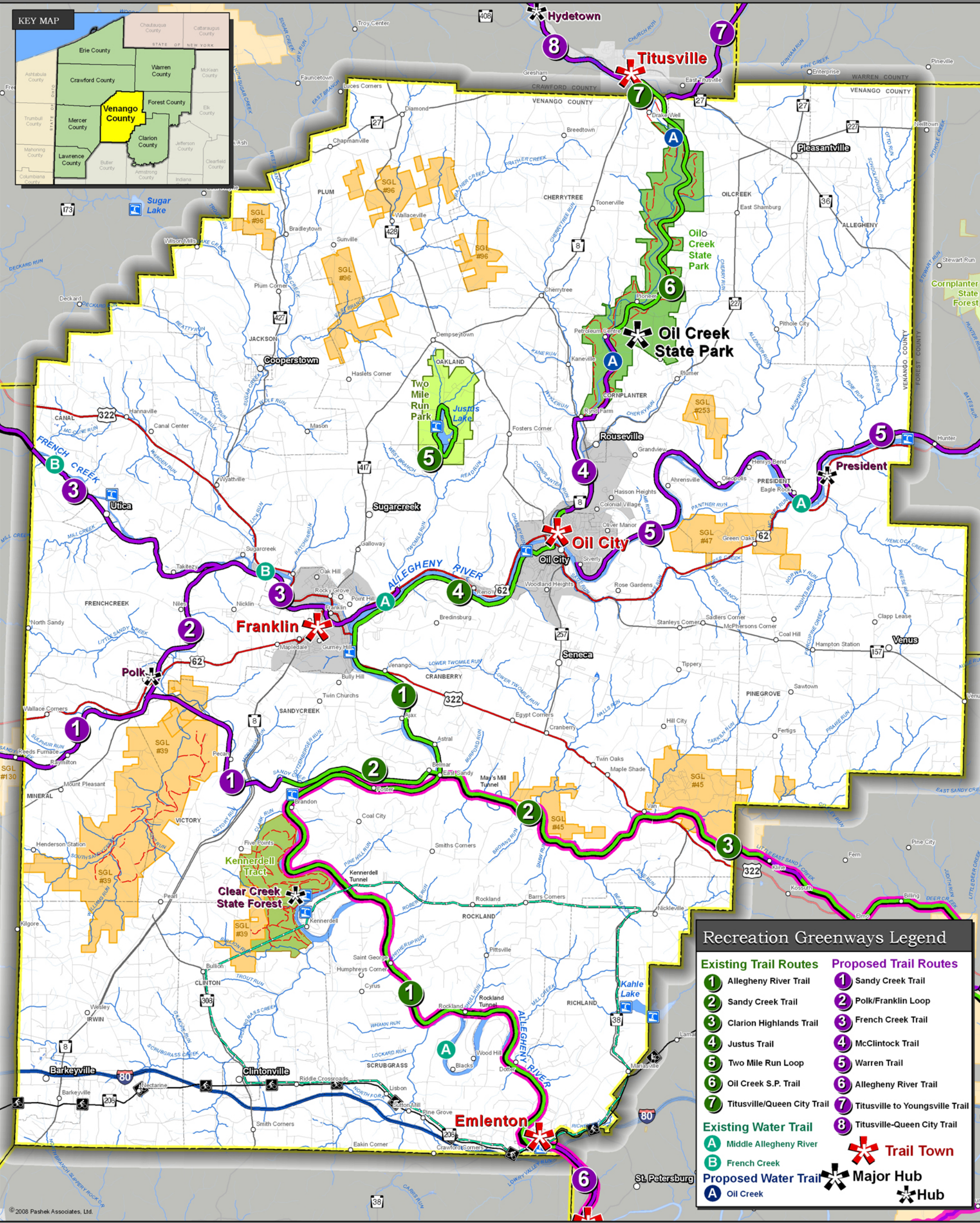
Northwest Pennsylvania Greenways Plan

Clarion County | Crawford County | Erie County | Forest County | Lawrence County | Mercer County | Venango County | Warren County



Northwest Pennsylvania Greenways Plan

Clarion County | Crawford County | Erie County | Forest County | Lawrence County | Mercer County | Venango County | Warren County



LEGEND

- County Boundary
- Municipal Boundary
- Urban Areas
- Lake / Reservoir
- River
- Interstate
- PA State Route
- US Highway

DCNR Managed Land

- State Park
- County & Local Parks
- State Game Land
- Pennsylvania State Forest
- PA Fish & Boat Designated Water Trail
- PA Canoeable Streams

Existing & Proposed Trails

- Existing Trail
- Potential Trail
- Existing North Country Trail
- State Forest, Park, Game Land Trails
- Bicycle PA Route
- Oil Country Trail
- Proposed Share the Road Bicycle Path

PFBC Access Points

Data Source:

ESRI 2005 Street Map USA Data
US Geologic Survey (USGS)
Pennsylvania Spatial Data Access (PASDA)
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