July 2003

Living with the River
Schuylkill River National & State Heritage Area

FINAL MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT

Management Organization

Schuylkill River Greenway Association
140 College Drive
Pottstown, PA 19464
484-945-0200
www.schuylkillriver.org

Lead Agencies:

National Park Service

Pennsylvania Department of Conservation and Natural Resources

Prepared by:

Wallace Roberts & Todd, LLC
Economics Research Associates
History Now
Living with the River
Schuylkill River National & State Heritage Area

Schuylkill River Greenway Association:
Kurt D. Zwikl, Executive Director
Dixie E. Swenson, Former Executive Director

Board of Directors:
Hannagert Hartman, President
Ronald C. Downie, Vice President
Alice W. Ballard, Secretary
Mark T. Major, Treasurer
Laurie Actman
Barbara Cohen
Jane L.S. Davidson
John A. Koury, Jr.
Christy Martin
Carl V. Raring
David Schmit
Rita Stevens
Dennis DeMara, Ex-Officio

Lead Agency Contacts:
Peter Samuel
National Park Service, Northeast Region
200 Chestnut Street - 3rd Floor
Philadelphia, PA 19106
215-597-1848

Timothy D. Keptner
Pennsylvania Department of Conservation and Natural Resources
Rachel Carson State Office Building
P.O. Box 8475
Harrisburg, PA 17105-8475
717-783-0988

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**Management Plan Steering Committee:**
- Dixie F. Swenson, Former Executive Director
- Jane L.S. Davidson, Heritage Preservation Coordinator, Chester County Park and Recreation Department
- Dennis DeMara, Pennsylvania Department of Conservation and Natural Resources
- Joseph DiBello, National Park Service
- Mark T. Major, Schuylkill County Visitors Bureau
- Kay Smith, Manayunk Development Corporation
- Michael Stokes, Montgomery County Planning Commission

**Management Plan Task Force:**
- Laurie Actman, Greater Philadelphia First
- Sheila Bello, Montgomery County Parks Board
- Jennifer Bowen-Frantz, Orwigsburg Historical Society
- Kate Damsgaard, French & Pickering Creeks Conservation Trust
- Randy Frey, French Creek State Park
- Cyndie Fuhrer, Berks County Conservancy
- Micah Gursky, Tamaqua Borough Council
- Tracy Kay, Schuylkill Center for Environmental Education
- Bob Layman, North Conventry Township Manager
- Cynthia Lenhart, Hawk Mountain Sanctuary
- James Lewars, Daniel Boone Homestead
- Valerie MacDonald, Shenandoah Chamber of Commerce
- Dale Mahle, Tri-County Chamber of Commerce
- Bill Manner, Pennsylvania Department of Environmental Protection
- Pat McKinney, Schuylkill Conservation District
- Christine McNeil, East Vincent Township Supervisor
- Barbara Pollarine, Valley Forge National Historical Park
- Dorothy Pulcher, PEKO Energy
- Bill Sanders, Hopewell Furnace National Historic Site
- Doug Seiler, Greater Norristown Corporation
- Gary Smith, Chester County Economic Development Council
- Gail Tomlinson, Fairmount Waterworks Interpretive Center
- Cathy Wegener, Berks County Heritage Center

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- Greg Matherly, United States of America: viii bottom, 1-3, 2-4 top, 10, 12, 1-15 top, 3-3, 3-6 bottom, 3-14 top, 3-16 middle, 3-18 top, 3-19, 3-21 bottom, 3-26 top, 3-31
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SUMMARY

A Special Place in Our Nation’s History

Few places in America can claim the Schuylkill River Valley’s importance in history. A variety of peoples—from the Lenni Lenapi to the first European settlers to the many other ethnic groups who migrated to the Schuylkill region over time—have called the River Valley home. Its abundant natural resources and productive soils made it an early industrial center and breadbasket for the colonies. During the American Revolution, the perseverance and sacrifice of George Washington’s army at Valley Forge played a key role in the birth of a new nation. The 19th century witnessed the emergence of the Schuylkill Valley as one of the world’s leading manufacturing regions, fueled in large part by anthracite coal mined from Schuylkill County. The Schuylkill River and canal system were one of the major arteries of the Industrial Revolution, transporting coal, manufactured goods, and crops to the port of Philadelphia. Industrial and mining activities impacted the Schuylkill River Valley’s water resources, leading to a new chapter in its history in the 20th century—one of environmental reclamation and water quality restoration on a massive scale, accompanied by the emergence of outdoor recreation as a major activity.

Today the Schuylkill River Valley is a diverse and dynamic region. The River Valley’s five counties—Berks, Chester, Montgomery, Philadelphia, and Schuylkill—are inhabited by some 3.2 million people. The Valley boasts abundant cultural, natural, and recreational resources; landmark sites of national significance; and historic communities and landscapes with uncounted stories to tell of the region’s heritage. Nevertheless, while much of the region’s past survives in the present, some significant challenges exist if the past is to be carried forward into the future.

Heritage Area Designation

In 1995, the Commonwealth of Pennsylvania designated the Schuylkill River and its major tributaries as a Heritage Corridor under the Heritage Parks Program and the Schuylkill Heritage Corridor Management Action Plan was approved. In 2000, the United States Congress acknowledged the River Valley’s national significance by designating the Schuylkill River Valley National Heritage Area. As established by Congress, the mission of the heritage area is:

To conserve, interpret and develop the historical, cultural, natural and recreational resources related to the industrial and cultural heritage of the Schuylkill River Valley.

1 This plan replaces the 1995 Management Action Plan for the Schuylkill Heritage Corridor under the State Heritage Parks Program.
The Schuylkill River Greenway Association (SRGA) is the designated management organization for the heritage area. This Management Plan and Environmental Impact Statement (EIS) sets out a comprehensive strategy for collaborative actions over time by SRGA and other heritage area organizations, governments, institutions, and citizens to achieve the mission.

**Looking Towards the Future**

The Schuylkill River Valley National Heritage Area is grounded in the past and the region's historical, cultural, and environmental heritage. However, the Management Plan is a forward-looking document, one that lays out a strategy to be implemented over a time horizon of ten years to promote quality of life, sense of place, and sustainable economic activity through the preservation, enhancement, and development of the Schuylkill River Valley's heritage resources. The Plan is motivated by the prospect of a better future that is captured by SRGA's Vision Statement:

*We envision a Schuylkill River region fully revitalized and restored: A region whose citizens understand, value and are fully committed to preserving and sustaining their cultural heritage and natural environment for future generations.*

The potential benefits for the Schuylkill River Valley's residents are many, including:

- historic resources and landscapes preserved as part of community life;
- waters and other natural resources protected and restored;
- historic boroughs and towns revitalized through heritage-related economic development;
- increased outdoor recreational opportunities; and
- enhanced community pride and identity.

Concerted, coordinated action at all levels – from grassroots citizen groups to regional heritage organizations to state and federal agencies – will be required to fully realize the heritage area's vast potential and to maximize its benefits for residents of the Schuylkill River Valley. SRGA will act as a catalyst for positive change effectuated through collaborative initiatives involving numerous private and public sector partners. These initiatives will build on the progress made in implementing the 1995 Management Action Plan and on the accomplishments of the many individuals and groups already working to preserve and enhance the Schuylkill River Valley's cultural, environmental, and recreational resources. *The end result will be a truly revitalized and restored Schuylkill River region.*
What is the Management Plan?

The Management Plan is, first and foremost, a guide for decision-making. Recognizing that the Schuylkill River Valley National Heritage Area will evolve over time as a result of voluntary actions and partnerships among numerous organizations within the watershed, the Plan does not attempt to prescribe a detailed list of actions. Rather, it provides the direction, criteria, and processes needed to establish priorities and to make informed decisions. It establishes an overall structure for conserving, enhancing, and linking heritage resources in the form of goals, strategies, and primary interpretive themes. It illustrates and provides examples of the ways that public and private partners can work together to achieve the heritage area mission. Finally, it sets some basic priorities for heritage area programs over the next two years, along with guidance for monitoring success in achieving the goals.

Goals and Strategies

Heritage areas combine preservation of historical, cultural, and natural resources, recreation, and education with tourism and small business development in strategic initiatives to enhance the economy and quality of life of local communities. In support of this basic purpose, the Management Plan establishes goals and strategies for five key areas:

1. Resource Conservation and Enhancement
2. Education and Interpretation
3. Recreation
4. Community Revitalization
5. Heritage Tourism

Resource Conservation and Enhancement Strategies

- Preserve and enhance historical and cultural resources.
- Preserve and restore the Schuylkill River Valley’s significant environmental resources, particularly those vital to the health of the River and its tributaries.
- Support sustainable land use, open space, and greenway planning and preservation related to the Schuylkill River Valley’s cultural and natural landscapes.
Education and Interpretation Strategies

- Establish a consistent, area-wide framework for the interpretation of the Schuylkill River Valley’s heritage resources.
- Connect heritage sites and resources through interpretive themes and products.
- Support educational and research initiatives that teach the public about the Schuylkill River Valley’s historical, cultural, and natural heritage.

Recreation Strategies

- Complete development of the Schuylkill River trail system, including connections to tributary trails.
- Enhance existing and provide new outdoor recreational opportunities related to the Schuylkill River Valley’s natural and cultural heritage.

Community Revitalization Strategies

- Conserve and use heritage resources to foster sustainable economic activity in traditional centers.
- Promote entrepreneurial activity and small business development related to the Schuylkill River Valley’s heritage resources.

Heritage Tourism Strategies

- Use a distinct visual image and identity in the design of heritage area products such as informational materials, signage, and interpretive exhibits.
- Develop physical and programmatic linkages between heritage area destinations to assist visitors in experiencing the Schuylkill River Valley’s diverse resources.
- Promote awareness of and increase visitation in the Schuylkill River Valley National Heritage Area through public relations and marketing programs.
Primary Interpretive Themes

Enhanced interpretation of the Schuylkill River Valley’s people and resources is an integral part of the Management Plan and is interwoven throughout the plan strategies. The Plan establishes three broad, unifying interpretive themes to link and inform the rich and diverse stories told by individual sites and attractions throughout the Schuylkill River Valley National Heritage Area. These themes are:

1. **Making History**: The Schuylkill River Valley has a deep and rich historic legacy, and the theme of history-making—in the past and continuing to the present day—connects the whole length of the watershed.

2. **Creating Community**: The Schuylkill River Valley is preeminently a place of communities, as expressed in its diverse cities, towns, villages, hamlets, and neighborhoods, and in its cultural and social organizations, institutions, and traditions.

3. **Reclaiming the River**: Building on past and present efforts to protect and reclaim the Schuylkill River and its watershed, this theme links history and environment. It encourages residents and visitors to view the waters of the Schuylkill River and its tributaries as a vital commons and to lay claim to a shared heritage.

These three themes provide the framework within which a multiplicity of secondary themes and sub-themes can be developed to articulate and connect the stories of heritage resources throughout the Schuylkill River Valley.

Implementation and Management

Ultimately, implementation of the Management Plan will depend upon voluntary actions and partnerships involving numerous public and private sector agencies, organizations, and citizens. Thus the Plan is designed to provide an implementation and management framework for SRGA and its heritage partners as they work to achieve the mission and goals for the Schuylkill River Valley National Heritage Area. The framework begins with four principles for implementation:

1. **Partnerships**: Implement the Plan through collaborative partnerships involving the SRGA; federal, state, county, and local government; and private organizations, institutions, and businesses.

2. **Linkages**: Establish a variety of programmatic and physical connections among sites, attractions, and resources throughout the heritage area.

**Implementation and Management: Key Plan Components**

- Principles for Implementation
- Project Evaluation Criteria
- Priority Action Programs
3. **Regional Impact:** Focus on programs and actions that will most effectively build a regional identity for and increase visitation within the Schuylkill River Valley National Heritage Area.

4. **Sense of Place:** Enhance the quality of life of local communities through the conservation and development of heritage resources.

The Plan identifies project evaluation criteria as a key decision-making tool for use in assessing the importance of potential heritage programs, actions, and projects under consideration for implementation. These criteria address the following:

1. **The project must contribute to achieving one or more of the Management Plan goals** relating to resource conservation and enhancement, education and interpretation, recreation, community revitalization, and heritage tourism.

2. **The project must exemplify the four principles of implementation to a high degree.** Of particular importance are that the project:
   - Involve and leverage the resources of two or more partners, including a sponsoring partner with sufficient capacity to manage the project following completion.
   - Integrate one or more of the interpretive themes: Making History, Creating Community, and Reclaiming the River.
   - Address a site(s) or resource(s) of regional significance.
   - Respect the carrying capacity of heritage resources.

3. **The project must exhibit a high degree of quality,** as measured by the following:
   - It displays a high level of *authenticity* in its treatment of heritage resources.
   - It embodies high standards of *planning and design*.
   - It incorporates the heritage area *branding* set by the area-wide informational framework and visual design standards to be developed as one of the priority action programs.

The strategies contained in the Management Plan include a wide range of initiatives, programs, and actions that can be carried out through partnerships of heritage organizations and institutions to achieve the heritage area mission and goals. The Plan identifies several priority action programs that are especially important to the success of the heritage area and thus are identified as priorities for the first two years of plan implementation.
Priority Action Programs

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<tr>
<th>PROGRAM/ACTION</th>
<th>ESTIMATED COST</th>
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<tr>
<td>1. Develop programmatic linkages to build the regional identity and image of  the heritage area</td>
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<tr>
<td>• Enhance the heritage area website</td>
<td>$100,000</td>
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<tr>
<td>• Develop a visual design framework and standards to “brand” the heritage area</td>
<td>$50,000</td>
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<td>• Using the visual design framework, develop a prototypical design for wayfinding signage and implement model installations at key locations</td>
<td>$200,000</td>
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<tr>
<td>• Using the visual design framework, develop a prototypical design/layout for informational materials and implement a model informational brochure</td>
<td>$50,000</td>
</tr>
<tr>
<td>• Using the visual design framework, develop a prototypical design for interpretive exhibits and implement a model exhibit(s) at key heritage resource(s)</td>
<td>$300,000</td>
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<td>2. Work toward completion of the Schuylkill River Trail System</td>
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<td>• Recreational trail:</td>
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<td>– Develop a feasibility study/design for the Reading to Hamburg section</td>
<td>$700,000</td>
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<tr>
<td>– Complete selected critical gaps in the Schuylkill River trail and connections to tributary trails</td>
<td></td>
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<td>• Water trail:</td>
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<td>– Establish new landings and upgrade existing ones at multiple locations along the Schuylkill River</td>
<td>$300,000</td>
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<tr>
<td>• Interpretive trails:</td>
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<tr>
<td>– Develop a plan for a Schuylkill Canal Interpretive Trail and begin implementation, possibly including as early actions an informational brochure and model interpretive installation in coordination with Action Program 1</td>
<td>$300,000</td>
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<tr>
<td>– Develop a template for a birding trail (model trail guide and informational packet)</td>
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<td>3. Continue to develop a heritage area gateway system</td>
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<td>• Identify and move forward with gateways at five locations, modeled after the existing locations</td>
<td>$400,000</td>
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<td>4. Work through the Schuylkill River Watershed Network or other partnership arrangement to initiate at least two additional projects of area-wide significance. The following are provided as examples:</td>
<td></td>
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<td>• Design and begin implementing a watershed-wide water quality monitoring program</td>
<td>$350,000</td>
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<tr>
<td>• Work with property owners and the community to develop a feasibility study, economic assessment and plan for the future use/interpretation of the St. Nicholas Coal Breaker</td>
<td>$200,000</td>
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Notes:
1. The estimated costs are not meant to be definitive, but rather to provide an idea of the level of financial resources that will be required to implement the action programs.
2. The estimated costs are to be shared among heritage partners.

Planning Process

The process of preparing the Management Plan and EIS included extensive public participation and outreach. Public meetings in Pottsville, Pottstown, and Philadelphia were held in the initial stages of the project and again to consider plan alternatives. A third set of public meetings was conducted on the Draft Management Plan and EIS. In addition, members of the public were invited to share their thoughts and comments throughout the planning process via e-mail to the SRGA website (www.schuylkillriver.org).
A seven-person Steering Committee guided preparation of the Management Plan. A larger Task Force comprised of 23 citizens and officials representative of heritage interests within the Schuylkill River Valley provided input at key points in the planning process. Outreach efforts included interviews with representatives of federal, state, regional, and local governments; private organizations and institutions; and others with an interest in the future of the heritage area. Additional coordination was conducted with representatives of a range of federal and state agencies that would potentially have an interest in the Management Plan and EIS.

During the planning process, a range of alternatives for the future management of the Schuylkill River Valley National Heritage Area was considered. Four alternatives – No Action (continuation of the status quo) and three Action Alternatives – were developed and evaluated for their performance in meeting the heritage area mission and goals. Based upon this evaluation and input on the alternatives received at a series of public meetings, a Preferred Alternative was selected. Called the “Layers” Alternative, it calls for a comprehensive management strategy that focuses both on preserving and enhancing clusters of heritage resources/attractions (places) and on establishing thematic and physical connections between the places. The Layers Alternative is also the Environmentally Preferred Alternative because it has the highest potential of all the alternatives to leverage resources and partnerships for the protection and enhancement of natural, historical, cultural, and recreational resources. The Layers Alternative was developed into the plan strategies and framework for implementation and management that form the heart of the Plan.

The anticipated environmental impacts of the four alternatives on the following five categories of resources are addressed in Chapter 4.0 (Environmental Consequences) of the Management Plan and EIS:

- Natural Resources
- Cultural Resources
- Recreational Resources
- Land Use
- Socio-economic Conditions

Because of the programmatic scope of the Management Plan and EIS, the Environmental Consequences chapter addresses the general types of impacts that could be associated with the strategies and actions emphasized by each of the alternatives rather than discussing the impacts at the site-specific project level. (Future actions may be required to undergo project level environmental assessment prior to implementation.
as required by the National Environmental Policy Act (NEPA).)
Most of the impacts on environmental resources resulting from
implementation of the Management Plan are expected to be positive
because of the Plan's resource preservation and enhancement goals.
There is the potential for impacts caused by increased visitation or
certain types of development that may be generated as a secondary
effect of programs and actions taken to implement the Plan.
However, the Plan's emphasis on sustainable land use and community
revitalization implies that most secondary development will be positive
and intended. In addition, any adverse impacts due to visitation will
likely be minimal and outweighed by the effects of improved economic
vitality and resource preservation and enhancement. The evaluation
criteria included in the Plan require that infrastructure be available or
easily developable to accommodate increased visitation resulting from a
project and that the project not
have significant adverse impacts on or exceed the carrying capacity of
environmental resources.

The results of public and agency review of the Draft Management Plan
and EIS confirmed the direction set in the Plan, including the selection
of the Preferred Alternative. Revisions have been made to portions of
the Plan to respond to comments made during the review period.
1.0 THE PLANNING CONTEXT
1.0 THE PLANNING CONTEXT

1.1 PROJECT LOCATION AND BACKGROUND

The Schuylkill River Valley National Heritage Area is located in southeastern Pennsylvania within the drainage area (watershed) of the Schuylkill River from its headwaters in Schuylkill County through the City of Philadelphia. It encompasses the river's watershed within five counties: Schuylkill, Berks, Chester, Montgomery, and Philadelphia (Figure 1-2). Historic centers within the watershed include, among others, Tamaqua, Pottsville, Reading, Pottstown, Phoenixville, Norristown, and Philadelphia.

Regional Location

Native Americans were the first inhabitants of the Schuylkill River Valley. The Lenni Lenape called the River “Ganshowahanna”, or Falling Water, and considered it a great fishing river. In the 1600s the Dutch became the first Europeans to explore the River, naming it “Skokihl” or Hidden Creek, which over time became “Schuylkill.”

Since the 1700s the Schuylkill River Valley has played a significant role in the development and growth of the region and the country. The City of Philadelphia grew along the shores of the Schuylkill and Delaware Rivers and became the nation’s first capital. Many significant events of the Revolutionary War occurred upstream of the City, along the river, and within the nearby watershed. One of the world’s first public water
systems was developed in Philadelphia using water from the river. By the early 1800s, the Schuylkill Valley became one of the most important manufacturing and productive agricultural regions in the country. Coal mined from the southern anthracite fields of Schuylkill County fueled the development of the nation’s early manufacturing industry. By manipulating the river with slack water pools and canals, the Schuylkill Navigation System provided a transportation corridor to bring coal, manufactured goods, and crops to the port of Philadelphia. In the 1840s, railroads such as the Philadelphia and Reading began to supersede the canal system as the principal carriers of bulk freight. Today the Schuylkill River Valley contains significant recreational and historic resources, such as Fairmount Park, Valley Forge National Historical Park, Hopewell Furnace National Historic Site, and French Creek State Park. It has a number of population and cultural centers, such as Philadelphia, Reading, Pottstown, Norristown, and Pottsville. It supports a diverse population and market for the promotion of its key historic and recreational attractions.

The Schuylkill River was Pennsylvania’s first recognized “Scenic River,” designated by the Commonwealth in 1987. Eight years later, the Commonwealth further recognized the historic and recreational significance of the area, designating part of the watershed as the Schuylkill Heritage Corridor under the Commonwealth of Pennsylvania’s Heritage Parks Program. After five years of management as a state heritage corridor, it became evident that there were significant recreational and cultural resources beyond the borders of the heritage corridor that should be conserved. National recognition of the Schuylkill River was also warranted.

Two studies identified and analyzed the significance of resources in the region, eventually leading to its designation as a National Heritage Area:

**River of Revolutions, January 1992:** *River of Revolutions* established the Schuylkill River Valley as a place of special importance in the development of the nation. It summarized the historical influences of the region and identified potential heritage resources and significant regional heritage themes.

**Management Action Plan for the Schuylkill River Heritage Corridor, March 1995:** The *Management Action Plan* has guided the organization, management, and promotion of the Heritage Corridor for the last eight years. It designated the Schuylkill River Greenway Association (SRGA) as the lead management organization and made recommendations for interpretation, marketing, and capital investment in the corridor. These recommendations have led to the implementation of projects intended to conserve, interpret, and market the corridor’s rich heritage resources.
Several other recent initiatives recognize the resource value of the heritage area and offer strategies for enhancing interpretation of its cultural resources while effectively managing its natural resources. These initiatives include:

- *State of the Schuylkill River Watershed*, 2002
- *Schuylkill Watershed Conservation Plan*, 2001
- *Montgomery County Schuylkill River Greenway Stewardship Study*, 2001
- *Chester County Landscapes*, 1996
- *Montgomery County Open Space Plan*, 1996

In 2000, Congress recognized the historic and natural importance of the Schuylkill River Valley by designating it a National Heritage Area with SRGA as the lead management organization. Designation and management of the Schuylkill River Valley National Heritage Area reinforces the efforts of prior and current initiatives to conserve and enhance the River Valley’s diverse heritage resources.

### 1.2 PURPOSE AND NEED

Designation and management of the Schuylkill River Valley National Heritage Area is intended to fulfill several objectives. As established by Congress, the overall heritage area mission is:

*To conserve, interpret and develop the historical, cultural, natural and recreational resources related to the industrial and cultural heritage of the Schuylkill River Valley.*

This mission is to be achieved through partnerships among regional and local organizations and governments to preserve, interpret, and promote the River Valley’s heritage resources. The promotion of local heritage resources is intended to stimulate local economies, while preserving threatened cultural and natural landscapes. The creation of a unifying interpretive framework for the heritage area is proposed to encourage cooperation and partnerships among the private, public, and nonprofit sectors. Management as a heritage area is intended to increase public awareness of heritage resources through public outreach/education and by maximizing their benefits for local communities and residents.

Referred to as “heritage partners” throughout the Management Plan, a variety of public and private sector agencies and organizations with an interest in historical, cultural, natural, and/or recreational resource preservation and enhancement will work cooperatively to achieve the heritage area mission. As administrators of the National Heritage Area and State Heritage Parks Programs, respectively, the National Park Service and Pennsylvania Department of Conservation and Natural
1.0 The Planning Context

Resources (DCNR) will be key partner agencies. Examples of other heritage partners include:

- Regional and local organizations engaged in cultural/historical resource preservation
- Regional and local environmental organizations (e.g., watershed groups, land conservation trusts)
- County and local governments
- Regional tourism promotion and economic development agencies

1.2.1 Threats to Heritage Resources

The Schuylkill River Valley National Heritage Area has a rich historic legacy and is endowed with abundant natural, recreational, and cultural resources. At one time it provided a wealth of coal, agricultural products, and iron manufacturing and textile goods to a developing country. Many historic and cultural resources remain from this period of unprecedented growth in the nation’s early history. There are also many parks and water access points that contribute to the area’s scenic and recreational value.

However, several factors threaten the historic and natural resources of the region:

_Many of the historic boroughs are struggling with the loss of local industry and erosion of their traditional roles as centers of commerce, employment, and culture._ For example, many communities in Schuylkill County have steadily lost population due to the decline of the coal and textile industries in Pennsylvania. Many historic remnants of the local industry and early settlements in these areas could be lost. The scars left from strip mining remain visible on the landscape. Waterways suffer degradation from past mining practices and inadequate sewage treatment facilities. Many towns that relied on local industry have fragile economies and lack the financial resources to preserve or restore their cultural centers. Downtowns have been severely impacted by the emergence of suburban shopping centers and employment parks.

_Residents are often unaware of the Schuylkill River watershed’s significance and the attractions it contains._ Many residents are unaware that they live in the Schuylkill River Valley. The large size and diversity of the watershed contributes to this lack of awareness. Attractions located within the heritage area are not well promoted to other parts of the watershed and to nearby population centers. Residents of and visitors to Philadelphia are often not aware that the river flowing through the City originates in the coal-mining region of Schuylkill County more than 100 miles away. Few people know that the region was the site of one of the first paper mills and public waterworks. Most educational institutions and centers do not incorporate the area’s unique human and natural history into their curriculum. The preservation of heritage resources is dependent upon their acknowledgement and enjoyment by nearby residents.
Governance within the heritage area is fragmented due to its large geographic area and the diversity of its resources. State and federal agencies and municipal and county governments each have authority over parts of the heritage area. An extraordinary number of local watershed, economic development, and conservation organizations are at work to preserve and promote the resources of the region. A unifying framework for heritage resource conservation and development will foster partnerships and will help these organizations and governments in project planning and implementation.

While the heritage area has many parks and open natural areas, recreational opportunities have not been fully realized. Trail networks that connect the recreational and historic resources are incomplete. Visitor use of state gamelands is relatively low. Access to the Schuylkill's waterfront is impeded in many areas, often by abandoned industrial sites and railroads. Optimization of recreational resources could provide watershed communities with opportunities to attract residents and tourists.

While water quality has been improving throughout the heritage area, a number of water quality concerns remain. Many of the headwater streams in Schuylkill County are contaminated by acid mine drainage and other pollutants. Streams in the lower portions of the heritage area are often impacted by non-point source pollution associated with urban runoff. Drainage from agricultural practices affects waterways in Berks County. High levels of PCBs and mercury are a potential health issue, triggering fish consumption advisories. In addition, water from the Schuylkill River is the primary source of drinking water for area residents. The water is treated; however, poor water quality can cause high treatment costs.

New development, industrial practices, and coal mining have impacted the heritage area's scenic resources. Population increases are causing many areas that were historically wooded or farmed to develop quickly. The agricultural inheritance of northern Montgomery County, Chester County, and much of Berks County is threatened due to the influx of new residents into rural areas. Abandoned strip mines affect the scenic beauty of the mountains in Schuylkill County. Local governments and conservation organizations have requested assistance in ways to preserve their rural legacy and scenic vistas while encouraging sustainable economic development.

1.2.2 Relationship to 1995 Management Action Plan

This Management Plan is an update to the 1995 Management Action Plan for the Schuylkill River Heritage Corridor prepared under the Commonwealth of Pennsylvania’s Heritage Parks program. The 1995
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Final Management Plan and Environmental Impact Statement

1.0 The Planning Context

...plan and subsequent implementation actions funded by Heritage Parks and managed by SRGA provide a sound foundation for the programs and initiatives proposed in this document. However, there are some significant differences between the 1995 Management Action Plan and the Management Plan for the Schuylkill River Valley National Heritage Area. These differences include:

1. **The Schuylkill River Valley National Heritage Area has a larger geographic scope than the State Heritage Corridor addressed by the 1995 Management Action Plan.** The National Heritage Area is composed of the Schuylkill River's watershed within Schuylkill, Berks, Chester, Montgomery, and Philadelphia Counties (approximately 1,740 square miles) while the State Heritage Corridor consisted of a more limited area along the river and its main tributaries (approximately 1,135 square miles).\(^1\)

2. **The Schuylkill River Valley National Heritage Area addresses a broader range of resources than the State Heritage Corridor.** The scope of the National Heritage Corridor includes historical, cultural, natural, and recreational resources. While the State Heritage Corridor also addressed a range of resources, under the Pennsylvania Heritage Parks Program it was established to focus primarily on industrial legacy of the Schuylkill River Valley.

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1 With this Plan the boundaries of the Schuylkill Heritage Corridor under the State Heritage Parks Program are expanded to include all of Schuylkill, Berks, Chester, Montgomery, and Philadelphia Counties.
3. The National Heritage Area Management Plan is intended as a programmatic guide for decision-making rather than as a detailed action plan. The 1995 Management Action Plan included a detailed, 10-year capital program of projects to be pursued to implement the plan. By contrast, this Management Plan is structured around strategies, programs, and criteria to be used by heritage area partners as guides for decision-making with respect to the specific actions and resource commitments they will make as they move forward with implementation of the Plan.

4. In accordance with the National Environmental Policy Act (NEPA), the Management Plan includes an Environmental Impact Statement (EIS) to assess potential environmental impacts associated with the National Heritage Area. An EIS was not required for the 1995 Management Action Plan. The EIS for the National Heritage Area Management Plan is programmatic in scope, addressing the general environmental consequences that could be expected to result from the types of programs and actions it contains (see Chapter 4.0). Additional NEPA assessment may be required for future, site-specific projects involving federal funding or action.

1.3 GOALS AND STRATEGIES
The Management Plan establishes five goals in support of the Schuylkill River Valley National Heritage Area mission. Strategies have been developed for each goal to provide more specific guidance for plan programs and actions to be carried out by SRGA and its heritage partner organizations to achieve the mission. These strategies are described more fully in Section 2.2.1.

1. Resource Conservation and Enhancement
   
   Goal
   Conserve and enhance the Schuylkill River Valley’s regionally significant historical, cultural, and natural resources.
   
   Strategies
   1A. Preserve and enhance historical and cultural resources.
   1B. Conserve and restore the Schuylkill River Valley’s significant environmental resources, particularly those vital to the health of the River and its tributaries.
   1C. Advocate sustainable land use, open space, and greenway planning and preservation related to the Schuylkill River Valley’s cultural and natural landscapes.
2. Education and Interpretation

Goal
Foster awareness and appreciation of the Schuylkill River Valley's heritage resources and the stories they have to tell.

Strategies
2A. Establish a consistent, area-wide framework for the interpretation of the Schuylkill River Valley's heritage resources.

2B. Connect heritage sites and resources through interpretive themes and products.

2C. Support educational and research initiatives that teach the public about the Schuylkill River Valley's historical, cultural, and natural heritage.

3. Recreation

Goal
Increase outdoor recreational opportunities related to the Schuylkill River Valley's natural and cultural heritage.

Strategies
3A. Complete development of the Schuylkill River trail system, including connections to tributary trails.

3B. Enhance existing and provide new outdoor recreational opportunities related to the Schuylkill River Valley's natural and cultural heritage.

4. Community Revitalization

Goal
Strengthen the Schuylkill River Valley's historic communities through sustainable community development related to heritage resources.

Strategies
4A. Conserve and use heritage resources to foster sustainable economic activity in traditional centers.

4B. Promote entrepreneurial activity and small business development related to the Schuylkill River Valley's heritage resources.

5. Heritage Tourism

Goal
Increase heritage tourism and associated economic benefits for the Schuylkill River Valley region and its communities.

Strategies
5A. Use a distinct visual image and identity in the design of
heritage area products such as informational materials, signage, and interpretive exhibits.

5B. Develop physical and programmatic linkages between heritage area destinations to assist visitors in experiencing the Schuylkill River Valley’s diverse resources.

5C. Promote awareness of and increase visitation in the Schuylkill River Valley National Heritage Area through public relations and marketing programs.

1.4 PRIMARY INTERPRETIVE THEMES

Establishing unifying interpretive themes to link and inform the stories told by individual sites and attractions throughout the Schuylkill River Valley National Heritage Area is key to achieving the heritage area mission and goals. Like other complex regions, the Schuylkill River Valley has several histories – and many stories. Given the rich variety of themes, events, personalities, and landscapes in the heritage area, a few salient ideas must be identified to focus attention and frame stories that resonate with area residents and visitors alike. The following primary themes have been selected to provide the basis for establishing a unifying interpretive framework for the heritage area:

Living with the River

1. Making History
2. Creating Community
3. Restoring the River

A few basic notions underlie the selected themes. To be effective the themes need to be experiential, not just intellectual. They must emphasize the centrality of the River and its watershed, its romance, and its importance as a regional commons and shared legacy. And it should be remembered that being serious and substantial does not preclude humor, wit, and playfulness.

It also should be noted that the three themes are not perfectly symmetrical. They overlap and interconnect. They are neither simple nor one-dimensional, but complex and rich with possibilities. Consequently, almost any place within the region evidences two or three themes at the same time, which is just what one would expect from a cultural landscape embedded with centuries of human experience.

Because the Schuylkill River is a dynamic icon for the region, the term “River” is used interchangeably with “watershed” and “River Valley” in the following discussion of three selected themes.

“To live by a large river is to be kept in the heart of things.”
- John Haines, Moments and Journeys
1. Making History

There are rivers of social and political change and rivers of people moving through the channels and backwaters of history.²

The Schuylkill River Valley National Heritage Area has a deep and rich historic legacy. Generations of area residents have established homes, raised families, made a living, and shaped the shifting currents of history. The heritage area was once the breadbasket of the colonies and also the most intensely industrialized region in the American colonies, a key region in the making of an independent nation, and an economic center of America’s most prolifically productive state (the Keystone State). In addition to being a center of American agriculture and industrialization, the heritage area is a site of nation-building and a model of American diversity—ethnic, racial, religious, and cultural.

The theme of history-making connects the whole length of the Schuylkill River Valley. At one end of the River is the mining museum at Ashland. At the mouth of the River is Historic Fort Mifflin. Between these two points are sites, communities, and features that reflect state and national history—to name a few:

- Valley Forge and the encampment of Washington’s Army
- The Oley and Skippack Valleys with their agricultural and craft traditions
- Pottsville and the story of the Molly Maguires
- Phoenixville and its steelworks
- Pennypacker Mills, Manayunk and the Schuylkill navigation system
- Cultural features—dams, bridges, aqueducts, landings, etc. – along the Schuylkill River and its tributaries

2. Creating Community

A home river is that rarest of friends, the one who frequently surprises you with new elements of personality without ever seeming a stranger.³

The Schuylkill River Valley National Heritage Area is preeminently a place of homes and communities: neighborhoods, villages, towns, and cities; churches, cultural organizations, and voluntary groups. Engaging stories of home and community life within the watershed link contemporary residents to history, historic preservation, open space programs, and conservation of agricultural acreage. This theme also invites residents and visitors to explore the River Valley’s rich traditions and celebrations of community.

The Schuylkill River Valley’s landscapes are dotted with cities, towns,

² John A. Murray, *The River Reader*
³ Paul Schullery, *Home River*
3. Reclaiming the River

Water is the blood of land—always in motion. 4

Efforts to protect the Schuylkill River and its watershed go back nearly 200 years. Particularly since World War II, area residents have successfully reclaimed their riparian heritage by confronting environmental issues, restoring communities throughout the watershed, and celebrating the romance of the River Valley through events such as the Sojourn. This theme links history and environment, encouraging residents and visitors to view the Schuylkill River as a vital commons and to lay claim to a shared heritage.

The story of reclamation embraces the story of earlier despoliation: sewage, runoff, pollution, deforestation, damming, diking, and filling. Aspects of reclamation can be found along the entire length of the River Valley, from Tamaqua with its fishing and hunting to the Fairmount Waterworks and Bartram’s Garden; from Hawk Mountain Sanctuary to the Wissahickon Gorge; from the post-World War II Schuylkill River Desilting Project to current programs to clean up acid mine drainage in Schuylkill County. Nature preserves, environmental centers, agricultural landscapes, parklands, arboreta, the greenway, and even the de-silting basins offer inviting opportunities to experience the traditional pleasures of man-in-nature and to accept responsibility for sustaining “the blood of the land.”

The three themes provide the foundation for the interpretive plan that is integral to and reflected in all sections of the Management Plan. Interpretation was used as a criterion in the process of evaluating alternatives and selecting the preferred alternative described in Section 2.1. Interpretive potential informed the selection of cultural and natural landscapes described as heritage resources in Chapter 3.0. The primary interpretive themes are interwoven throughout the strategies presented in Section 2.2.1, which work in combination to describe how an overall interpretive program is to be developed for the heritage area. The project evaluation criteria presented in Section 2.2.2 establish the interpretive themes as a basic criterion for determining priorities.

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4 Alice Outwater, Water, A Natural History
for heritage area programs and actions. Interpretation is also embedded in the priority action programs identified in Table 2.2. Taken together, the priority action programs and the decision-making framework set up by the Plan define the direction for a holistic approach to heritage area development that will be informed by interpretation at multiple levels.
2.0 THE PLANNING ALTERNATIVES
2.0 THE PLANNING ALTERNATIVES

2.1 ALTERNATIVES CONSIDERED

The planning process included consideration of a range of alternatives for the future management of the Schuylkill River Valley National Heritage Area. Four alternatives were developed and evaluated for their performance in meeting the mission and goals set forth in Section 1.3: the No Action Alternative (A) and three Action Alternatives (B, C, and D). The evaluation was based on the varying emphases placed by the alternatives on the 13 strategies presented in Section 1.3 to achieve the mission and goals (Table 2-1).

As part of the planning process, a series of public meetings was conducted at which the alternatives were presented for review. Based upon the evaluation of the alternatives and public comment, Alternative D (Layers) was selected as the Preferred Alternative developed into the recommended plan described in Section 2.2.

2.1.1 Alternative A: No Action

Alternative A does not propose any change to the current operation and management of the Schuylkill River Valley National Heritage Area. Although the Schuylkill River Valley has been designated as a National Heritage Area, current programs and levels of funding would continue to be administered by SRGA and no additional funding would be provided.

- Based upon Heritage Parks funding for the Schuylkill River Heritage Corridor through 2002, approximately $350,000 a year would be provided for heritage-related projects following the direction set by the 1995 Management Action Plan. This funding would leverage approximately $650,000 a year in public and institutional matching funds ($1.86 for each $1.00 in direct funding), resulting in a total investment of approximately $1 million a year. Approximately 80% of the program funding would be comprised of relatively small grants (up to $50,000) for a wide variety of local projects within the heritage area’s five counties. Examples of these projects include:
  - Tours and brochures
  - Development of segments of the Schuylkill River trail
  - Enhancements to local riverfront parks and boat landings as part of the Schuylkill River Water Trail
  - Development of visitor gateway facilities in individual communities

The remaining approximately 20% of State Heritage Parks funding would be provided in amounts of up to $75,000 for projects with area-wide impact. Examples of these projects include a heritage area public...
relations program, regional trail guides, and design of a heritage area signage system.

Because funding would remain at current levels, Alternative A would not increase the emphasis on any of the 13 strategies established for the Schuylkill River Valley National Heritage Area (Table 2-1). Thus it would be the least effective alternative in achieving the heritage area mission and goals related to resource conservation and enhancement, education and interpretation, recreation, community revitalization, and heritage tourism.

Table 2-1. Alternatives Evaluation

<table>
<thead>
<tr>
<th>STRATEGIES</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>1. Resource Conservation and Enhancement</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1A. Preserve and enhance historical and cultural resources</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
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<tr>
<td>1B. Conserve and restore the Schuylkill River Valley’s significant environmental resources, particularly those vital to the health of the River and its tributaries</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<tr>
<td>1C. Advocate sustainable land use, open space and greenway planning and preservation related to the Schuylkill River Valley’s cultural and natural landscapes</td>
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<td>2</td>
<td>2</td>
<td>1</td>
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<tr>
<td>2. Education and Interpretation</td>
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<tr>
<td>2A. Establish a consistent, area-wide framework for the interpretation of the Schuylkill River Valley’s heritage resources</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>2B. Connect heritage sites and resources through interpretive themes and products</td>
<td>3</td>
<td>2</td>
<td>1</td>
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<td>2C. Support educational and research initiatives that teach the public about the Schuylkill River Valley’s historical, cultural and natural heritage</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
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<tr>
<td>3. Recreation</td>
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<tr>
<td>3A. Complete development of the Schuylkill River trail system, including connections to tributary trails</td>
<td>3</td>
<td>2</td>
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<tr>
<td>3B. Enhance existing and provide new outdoor recreation opportunities related to the Schuylkill River Valley’s natural and cultural heritage</td>
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<td>2</td>
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<tr>
<td>4. Community Revitalization</td>
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<tr>
<td>4A. Conserve and use heritage resources to foster sustainable economic activity in traditional centers</td>
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<tr>
<td>4B. Promote entrepreneurial activity and small business development related to the Schuylkill River Valley’s heritage resources</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
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<tr>
<td>5. Heritage Tourism</td>
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<tr>
<td>5A. Use a distinct visual image and identity in the design of heritage area products such as informational materials, signage and interpretive exhibits</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>5B. Develop physical and programmatic linkages between heritage area destinations to assist visitors in experiencing the Schuylkill River Valley’s diverse resources</td>
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<td>2</td>
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<tr>
<td>5C. Promote awareness of and increase visitation in the Schuylkill River Valley National Heritage Area through public relations and marketing programs</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
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</tbody>
</table>

Alternatives:  
A = No Action  
B = Major Increase  
C = Moderate Increase  
D = No/Minor Increase  

Degree of Emphasis:

2.0 The Planning Alternatives
2.1.2 Alternative B: Places

Alternative B would use heritage area strategies, programs, and funding to enhance geographically based clusters of heritage attractions and resources, or places. This alternative would be directed primarily towards local residents and their visiting friends and relatives and secondarily towards visitors with a more intense interest in heritage resources. Places would be identified and developed based upon the following criteria:

- Significant heritage resources and attractions (existing and potential) are present in relatively close proximity.
- Visitor infrastructure (shops, restaurants, lodging facilities, transportation access, etc.) is available or can be developed.
- Local heritage partners with the requisite skills and resources are present and willing to participate in enhancing the place.

Twelve potential places that meet or could be developed to meet the above criteria have been identified (Figure 2-1). From north to south, these are:

1. Ashland
2. Tamaqua
3. Pottsville
4. Port Clinton
5. Reading
6. Oley Valley
7. Pottstown/Hopewell
8. Phoenixville/French Creek
9. Perkiomen
10. Valley Forge
11. Manayunk/Wissahickon
12. Philadelphia

Although the emphasis of the Places Alternative is on locally based resources and attractions, connections would be made to the larger Schuylkill River Valley National Heritage Area as follows:

- Small gateway facilities would be established within each place to orient and provide information to visitors on local resources and attractions within the context of the larger heritage area.
- Local heritage programs and products would be developed to fit within a consistent, area-wide informational, interpretive, and public relations framework.

Because heritage area funding and resources would be largely directed towards local initiatives, Alternative B would place the greatest emphasis on geographically focused strategies, including preservation/enhancement of the heritage resources that comprise a place (Strategy 1A) and community revitalization (4A and 4B) (Table 2-1).

Conversely, Alternative B would moderately increase the emphasis on

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1 These places have been identified for illustrative purposes only and should not be considered to comprise a definitive list. Similarly, Figure 2-1 should not be interpreted as a definitive representation of the clusters of heritage attractions and resources that would be emphasized under the Places Alternative.
heritage area strategies involving establishment of regional linkages.

With respect to public investment, Alternative B assumes that the operation and management of the Schuylkill River Valley National Heritage Area would be enhanced through the appropriation of the authorized limit of $1 million a year (no more than $10 million total) in federal funding. This funding would be in addition to the current State Heritage Parks funding level of $300,000 to $400,000 a year. Alternative B further assumes that the synergistic effect of the combined federal and state funding would leverage public and institutional matching funds at a higher rate than under Alternative A. These matching funds are estimated at $2.9 million ($2.15 for every $1.00 in direct funding), resulting in a total investment of approximately $4.25 million a year.²

2.1.3 Alternative C: Experiences

Alternative C focuses on market or interest-based topics that would be used to organize and guide visitors’ experiences of the heritage area. Strategies and programs would emphasize area-wide linkages, resources, and attractions that relate to these topics. This alternative would be directed primarily towards visitors with an intense interest in a particular heritage-related topic or topics and secondarily towards more casual users. Distinguishing elements of the Experiences Alternative include:

- Topically organized menus, itineraries, and event calendars would be developed to link heritage area resource and attractions. These programs and products would be developed to fit within a consistent, area-wide informational, interpretive, and public relations framework.

- Experiential “fill-ins” between attractions and resources would be developed. These fill-ins would be both resource-based (e.g., scenic roads) and program-based (e.g., audio tours).

- The Schuylkill River and associated trails (land and water) would be developed as a central spine to which programmatic and physical linkages would be made from the topics.

- Small gateway facilities would be distributed in key locations throughout the heritage area to orient and provide information to visitors, with an emphasis on the experiential topics.

- Partners with special interests, skills, and resources pertaining to particular topics would participate in developing linkages at a regional scale.

²The estimated rate of leveraging is based on the types of public and institutional support and the level of recognition of the heritage area that could be expected under this alternative (see Appendix D).
Fifteen potential topics that might be addressed under this alternative have been identified and are listed alphabetically:

1. Agricultural History
2. American Revolution
3. Art/Culture/Spectator
4. Curiosities/Oddities
5. Ecology/Environmental History
6. Ethnic/Cultural/Religious
7. Fairs/Festivals/Community Days
8. Food and Drink
9. Historic Houses
10. Industrial History
11. Mining History
12. Outdoor Recreation
13. Scenic Landscape
14. Shopping
15. Transportation

These topics have been identified for illustrative purposes only and should not be interpreted as all-inclusive or definitive. Figure 2-2 is similarly illustrative in nature, showing conceptual linkages between selected attractions/resources pertaining to five of the topics. The Schuylkill River and Perkiomen Creek are shown as providing linkages related to multiple heritage topics. Thus the Schuylkill River/trail system in particular can function as a central, organizing “spine” that ties together sites and experiences throughout the heritage area.

The Experiences Alternative would place the greatest emphasis on strategies designed to link resources at an area-wide or regional level (Table 2-1). These strategies include regional-scale preservation/restoration of environmental resources (1B) and development of outdoor recreational opportunities (3A and 3B), establishment of interpretive linkages (2B), and developing physical linkages to promote heritage tourism (5B). Conversely, Alternative C would moderately increase the emphasis on “place-based” strategies such as community revitalization (4A and 4B). It would require more sophisticated levels of management and coordination than Alternative B because of its emphasis on regional connections.

With respect to public investment, Alternative C assumes that the operation and management of the Schuylkill River Valley National Heritage Area would be enhanced through the appropriation of the authorized limit of $1 million a year (no more than $10 million total) in federal funding. This funding would be in addition to the current State Heritage Parks funding level of $300,000 to $400,000 a year. Alternative C further assumes that the synergistic effect of the combined federal and state funding would leverage public and institutional matching funds at a rate similar to Alternative B and higher than Alternative A. These matching funds are estimated at $2.9

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Footnote: The estimated rate of leveraging is based on the types of public and institutional support and the level of recognition of the heritage area that could be expected under this alternative (see Appendix D).
million ($2.15 for every $1.00 in direct funding), resulting in a total investment of approximately $4.25 million a year.³

2.1.4 Alternative D: Layers (Preferred and Environmentally Preferred Alternative)

Depicted for illustrative purposes in Figure 2-3, Alternative D is a combination of the first two Action Alternatives (B and C). It would pursue development of intersecting layers in the form of 1) clusters of resources/attractions (places) and 2) area-wide topics that thematically connect the places. Thus the Layers Alternative would be directed both to casual users (local residents and their visiting friends and relatives) and to more serious heritage tourists. Linkages among and between places and themes are central to this alternative:

- Persons attracted to a place to explore a particular topic may discover and pursue another topic or topics of interest that they learn about in experiencing the place.

- Residents of or casual visitors to a place may discover topics of interest and thus be enticed to explore thematically linked resources and attractions elsewhere in the heritage area.

Alternative D is more comprehensive than Alternatives B and C in that it would simultaneously pursue place-based and regional connection strategies. To accomplish this, it is assumed that Alternative D would significantly increase the emphasis placed on all of the strategies (Table 2-1). It would require the most sophisticated levels of management and coordination of the three Action Alternatives.

With respect to public investment, Alternative D assumes that the appropriation of the authorized limit of $1 million a year in federal funding (no more than $10 million total). This funding would be in addition to the current State Heritage Parks funding level of $300,000 to $400,000 a year. In this respect Alternative D is identical to Alternatives B and C. However, it is assumed that the synergistic effect of combining both federal and state funding and the place-based and experiential strategies of Alternatives B and C, respectively, would leverage public and institutional matching funds at a higher rate than either of those two alternatives. These matching funds are estimated at $3.9 million ($2.89 for every $1.00 in direct funding), resulting in a total investment of approximately $5.25 million a year. Thus Alternative D would achieve the highest levels of public and institutional investment in heritage-related programs and initiatives of any of the alternatives.

On an overall basis, the Layers Alternative is considered to be the most effective of the Action Alternatives in meeting the heritage area mission and goals. It is the Environmentally Preferred Alternative because it has the highest potential of all the alternatives to leverage resources and
partnerships for the protection and enhancement of natural, historical, cultural, and recreational resources. While this alternative is projected to result in the greatest increase in visitation of all of the alternatives, any environmental impacts resulting from the increased visitation are expected to be minor and will be more than outweighed by positive benefits associated with the protection and enhancement of natural, historical, cultural, and recreational resources (see Table 4-3, Comparison of Environmental Impacts of Alternatives). The Layers Alternative also emerged as the consensus alternative of choice at the public meetings. Therefore, the Layers Alternative has been selected as the Preferred Alternative for development into the recommended plan described in Section 2.2.

2.2 THE PLAN

The plan developed from the Preferred Alternative provides a management framework and guide for decision-making by the Schuylkill River Greenway Association (SRGA) and its heritage partner organizations as they work to achieve the mission and goals for the Schuylkill River Valley National Heritage Area. The plan includes the following elements:

- **Plan Goals** establish broad directions for future initiatives and programs in support of the heritage area mission. The goals address resource conservation and enhancement, education and interpretation, recreation, community revitalization, and heritage tourism (see Section 1.3).

- **Plan Strategies** describe the types of programs and actions that will be carried out through partnerships of public and private heritage area agencies, organizations, and institutions to achieve the mission and goals. A total of 13 strategies have been identified, each of which addresses a subject area related to one of the five goals.

- **An Implementation and Management section** provides direction for decisions and actions that will be taken to implement the Plan. Included are:
  - Principles and criteria for decision-making
  - Definition of SRGA’s role as the heritage area management entity
  - Action programs to be undertaken as priorities during the first two years of plan implementation
  - Guidance for monitoring success in achieving the plan

2.2.1 Plan Strategies

The Layers Alternative is the Preferred and the Environmentally Preferred Alternative. It focuses both on clusters of heritage resources and on developing linkages between those clusters.
A wide range of strategies is proposed to “activate” the Schuylkill River Valley National Heritage Area. Although these strategies are assigned to discrete goals, they are designed to intersect, overlap, and complement one another in achieving the basic purposes of the heritage area.

The primary interpretive themes—Making History, Creating Community, and Reclaiming the River—are integral to and interwoven throughout the strategies. In keeping with the purpose of the Plan as a management framework and guide for decision-making, the strategies are not intended to be exhaustive or prescriptive in nature. Rather they have been crafted to illustrate the various ways heritage partners can work together to preserve and enhance the area’s historical, cultural, natural, and recreational heritage. Because the Schuylkill River Valley is a dynamic and evolving region, new opportunities will continue to emerge that support the heritage area goals and strategies. Berks County’s Schuylkill Riverfront Revitalization project in Reading and the plans by the National Audubon Society to establish a flagship environmental education center in Montgomery County at Mill Grove, John J. Audubon’s first American home, are examples of two initiatives launched while the Management Plan was in preparation.

1. RESOURCE CONSERVATION AND ENHANCEMENT

1A. Preserve and enhance historical and cultural resources.

Historic preservation is part of the discourse between past, present, and future. John Lawrence of Tulane University describes this dynamic:

*The basic purpose of preservation is not to arrest time, but to mediate sensitively with the forces of change. It is to understand the present as a product of the past and a modifier of the future.*

Two elements of this approach deserve emphasis. First, preservation is not a product, but rather a process, and therefore it is ongoing. Second, preservation requires understanding, hence the need for systematic research and documentation to support preservation efforts. Systematic documentation also helps to sustain interpretive links (Strategies 2A and 2B) and education (Strategy 2C).

Over recent decades, preservation activities—in the Schuylkill River Valley and elsewhere—have intensified. Historic preservation has expanded in scope and in scale. Moreover, the preservation movement recognizes many different kinds of intervention: preservation (maintenance as is), conservation (stabilization and repair), restoration (return to an earlier condition), reconstruction (replication), and rehabilitation (adaptive re-use). Instances of these different preservation practices can presently be found within the heritage area (e.g., adaptive

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4 Quoted in Norman Tyler, *Historic Preservation: An Introduction to Its History, Principles, and Practices*
reuse of the SRGA headquarters building in Pottstown and the Foundry Building in Phoenixville; reconstruction of the soldiers’ huts at Valley Forge National Historical Park).

In its initial stages, the preservation movement concentrated primarily on single sites and structures, mostly associated with prominent people and events. Valley Forge, the Daniel Boone Homestead, and Pennypacker Mills are salient instances of this impulse. Over time, the preservation movement has broadened in scope beyond single buildings to include assemblages of structures, neighborhoods, and landscapes. Community goals in these efforts range from protection of historic structures, traditional aesthetics, or property values to growth management to economic revitalization and heritage tourism. In recent years, new attention is being paid to preservation of rural landscapes, including open space, farms, and forests (see Strategy 3B).

Within the Schuylkill River Valley National Heritage Area, numerous resources have been identified as historically significant, ranging from cultural landscapes to single structures. Historic districts and historical commissions, preservation and conservation organizations, historical societies, public agencies, and other groups have already taken responsibility for the stewardship of many different kinds of resources. The need to sustain these resources is already widely recognized within the heritage area.

However, the conditions under which these resources exist vary widely within the region. While some resources fall within the purview of historic districts or historical commissions—as is the case in many Chester County communities and in Philadelphia, for example—other areas have listed relatively few significant sites and resources or have few mechanisms in place to promote stewardship, even in the public sector. Schuylkill County has few sites listed on the National Register of Historical Places, although it has numerous landscapes, sites, and structures of historical significance. Achieving greater consistency in standards across the region—while recognizing particular local circumstances and concerns—is an integral part of the Management Plan preservation strategy.

The Schuylkill River Valley National Heritage Area offers opportunities to promote the preservation and enhancement of these resources at a regional level. These efforts can take two related, but distinct forms:

1. A focus on stewardship of heritage resources of regional (as distinct from local) significance
2. An effort to raise the levels of stewardship practice to a more consistent level throughout the heritage area among public agencies, private organizations, and individuals engaged in historic preservation
Examples of possible initiatives include:

- **Build on existing regional linkages:** Completion of the Schuylkill River Trail system (see Strategy 3A) and development of a visual design framework (see Strategy 5A) will call out many significant historical and cultural resources and help to promote new awareness of stewardship responsibilities. The Schuylkill River itself is only the most prominent instance of reclamation within the Heritage Area: many sites can be directly linked to the theme of reclamation. Thematic linkages will draw visitors to established sites that serve as models for good stewardship. The theme of reclamation can be developed through interpretive programs and displays at many sites, giving visitors concrete instances of stewardship at work.

- **Coordinate regional preservation efforts:** Preservation efforts operate largely at the local or county level. While this reflects local conditions and circumstances, collaboration among preservation agencies throughout the region can help to articulate a set of basic standards for resource preservation and to promote local preservation efforts. A regional preservation “roundtable” could serve as a vehicle for exchanging information and providing instances of “best practice.” Such a roundtable could coordinate and promote local activities such as an annual schedule of preservation events. It could also serve as a vehicle for developing new voluntary partnerships among preservation agencies, organizations, and concerned individuals.

- **Promote programs that feature “best practice” in stewardship:** Heritage preservation operates most powerfully and perhaps meaningfully at the local level and these local preservation efforts now address whole communities, historic districts, single sites, and even rooms and assemblages in historical museums. At the local, county, and regional levels, tours and publications can encourage awareness and appreciation of “best practice” in historic and cultural preservation. Such programs are already conducted annually in Berks County, for example. Comparable programs can be developed in other locales, as well as on a regional level.

- **Encourage voluntary stewardship of significant sites:** Regional efforts are needed to help promote stewardship by private owners of significant historical resources. Many such resources lie outside preservation districts where regulatory or other approaches can encourage restoration and/or adaptive re-use. Coordinated publicity and dissemination of standards can help to encourage voluntary stewardship of resources that are deemed to be regionally significant. Public-private partnerships can help to engage private agencies, organizations and citizens in the preservation of regionally significant resources.
resources and encourage use of the full range of preservation tools, such as tax credits for rehabilitation or adaptive reuse, conservation easements, assessments, zoning and development reviews, and public recognition/interpretation.

• **Mitigate the impacts of increased use at established sites**: A heritage tourism increases within the Schuylkill River Valley, pressures on established cultural and historical resources will also expand. Many of the best-known and active sites and resources will be involved in regional efforts to promote tourism and local visitation. Such regional marketing should be informed by a stewardship ethic and clear standards that encourage established sites to protect their resources from the wear-and-tear that accompanies increased usage.

• **Identify, document, and protect additional historical and cultural resources**: Identification, research, and designation are important starting points for historic resource stewardship. In some locales, resources are being systematically inventoried, and designation through the state and national registers is commonly practiced. In addition to setting standards for stewardship, effective local and county efforts can be leveraged to encourage studies that help to fill in gaps in particular parts of the heritage area. Most efforts to identify and document heritage resources will likely be carried out at the local level but, by framing them in a regional context, each local effort can achieve greater significance and improve its chances for funding.

Historic preservation is an ongoing process, as in each generation new resources become eligible for designation, protective mechanisms (e.g., easements), and tax benefits. By adding new heritage resources to recognized listings, public agencies, private organizations, and individuals can enhance public awareness of stewardship and encourage a growing number of property owners and managers to participate in public-private partnerships and other voluntary preservation programs.

Because the Schuylkill River Valley is a National Heritage Area, cooperating partners will need to be cognizant of the national preservation standards embodied in *The Secretary of the Interior’s Standards for Rehabilitation*. Additional resources are available through programs of the National Trust for Historic Preservation and National Park Service, including Heritage Preservation Services, the Historic American Buildings Survey, the National Center for Recreation and Conservation, the American Indian Liaison Office, and the National Register of Historic Places. The Pennsylvania Historical and Museum Commission (PHMC) oversees the historic resource listing process in Pennsylvania for the National Register of Historic Places. The Commission has records that are available for researchers. Private, not-
for-profit organizations, such as the Institute for Cultural Partnerships in Harrisburg and the Philadelphia Folklife Project, can help to broaden preservation perspectives to include aspects of folklife and traditional cultures.

Cultural and historical resource preservation is, and will continue to be, the foundation for heritage interpretation, education, and visitation in the Schuylkill River Valley. Preserving legacies from the past creates cultural capital for the present and for future generations. This kind of stewardship or curatorial management is essential to protect the irreplaceable, while making the meaning of our built environments accessible to residents and visitors alike.

1B. Conserve and restore the Schuylkill River Valley's significant environmental resources, particularly those vital to the health of the River and its tributaries.

The Schuylkill River Valley National Heritage Area encompasses rich environmental resources, such as the River, its tributary streams, and other surface water; ridges, forests, and wildlife habitat areas; and productive farmland soils. The River Valley's heritage is essentially the story of human interaction with these resources over time. For more than 200 years, development of dams and canals changed the hydrology of the river, while mining and industry changed the face of the River Valley's landscape. By the mid 1800s the Schuylkill could no longer support fishing and recreation, but served as a transportation corridor and waste disposal system for the booming anthracite coal industry that helped fuel the nation's industrial revolution.

The Schuylkill River today is dramatically cleaner than it was 40 to 50 years ago. The aftereffects of heavy industry and mining—mine waste deposits in waterways, acid mine drainage, flooding and stream bank erosion, etc.—still affect the region's rivers and tributaries, but are being actively and successfully mitigated. Much of this success has depended on grassroots watershed initiatives with support from local, state and federal partners. Beginning with the revegetation of forests through the Civilian Conservation Corps in the 1930s, the state and federal governments have worked to address the environmental effects of mining across the State of Pennsylvania. An important historical example with national significance as an environmental restoration project is the Schuylkill River Desilting Project constructed in the late 1940s and early 1950s to abate the impacts of coal mine sediments.

Recent decades have seen renewed interest in preserving and restoring environmental resources, as evidenced by governmental initiatives at the state and local levels and the many private, non-profit conservation and watershed groups that are active within the Schuylkill River
Valley. Examples of recent planning studies that are currently being implemented include:

- **The Montgomery County Schuylkill River Greenway Stewardship Study**, sponsored by Montgomery County to protect water quality, promote and conserve open space, and preserve wildlife habitat and natural woodlands along the river.

- The **Schuylkill River Watershed Conservation Plan**, prepared through a partnership between The Conservation Fund, Natural Lands Trust, and the Patrick Center for Environmental Research at the Academy of Natural Sciences. This Plan is designed to be a guidebook for municipalities, conservation groups, and citizens interested in taking steps to enhance the long-term health of the Schuylkill River watershed.

The Schuylkill River Valley National Heritage Area provides an opportunity to further promote environmental restoration and preservation **at a regional level** through partnerships among interested agencies and organizations and to tie these efforts to cultural resource preservation and interpretation. Examples of potential initiatives include:

- **Develop a regional greenway strategy**: Building on the model provided by the *Montgomery County Schuylkill River Greenway Stewardship Study*, public and private agencies and organizations at the local, regional and state level could work towards development of a regional greenway system along the Schuylkill River and its major tributaries. As part of this strategy, environmental preservation and restoration efforts should focus on the River, streams, and their adjacent riparian zones (e.g., through the reestablishment of native vegetation along river or stream banks).

- **Develop a regional water quality monitoring program**: The Schuylkill Headwaters Association, Schuylkill Office of the Delaware Riverkeeper, Schuylkill Center for Environmental Education, and Philadelphia Water Department are examples of organizations that are currently engaged in water quality related programs and projects within the Schuylkill River Valley. A major opportunity exists to bring the efforts of such organizations together in a regional initiative to monitor the water quality of the Schuylkill River and its tributaries. The purpose of this program would be to establish a consistent baseline for measuring water quality conditions throughout the watershed, evaluating the effects of completed water quality improvement projects, and identifying where new projects are needed. In addition, the program could include an outreach component to educate the public about the results (e.g., regular publication of a “river water quality index”).
• **Establish a network of special birding areas and develop associated educational/interpretive trails:** Birding is a popular activity within the Schuylkill River Valley, anchored by the Hawk Mountain Sanctuary, an international leader in raptor conservation. Another important site is Mill Grove, a wildlife sanctuary and the first home of naturalist John James Audubon, located near the Schuylkill River in Montgomery County. The Schuylkill River de-silting basins offer potential for wildlife habitat restoration, as is currently being done in the Phoenixville area by Chester County in cooperation with the National Wildlife Service. An integrated regional strategy could be developed to identify and promote protection of important migratory flyways and other existing and potential bird habitat areas within the Schuylkill River Valley National Heritage Area. As part of this strategy, such habitat areas could be programmatically linked through a system of educational/interpretive informational materials, exhibits, and trails. This system would increase heritage area visitation by attracting birders from inside and outside the region and would teach visitors and residents about this important resource.

1C. **Advocate sustainable land use, open space, and greenway planning and preservation related to the Schuylkill River Valley’s cultural and natural landscapes.**

The Schuylkill River Valley’s historical, cultural, and natural resources have been shaped by centuries of human activity: cultivation, resource extraction, manufacturing, commerce, and (in recent decades) suburban and exurban development. The results of this latest trend are visible throughout the heritage area. Shopping centers, office parks, and residential subdivisions have proliferated, particularly in the growth areas of Montgomery, Chester, and Berks Counties. At the same time, older urban centers located along the Schuylkill River have declined as population and economic activity have shifted to new hubs of commerce, such as King of Prussia. These trends have impacted heritage resources ranging from rural agricultural landscapes that are being consumed by “sprawl” development to urban historic properties that are deteriorating due to the lack of economically feasible uses. If the River Valley’s cultural landscapes and other valuable heritage resources are to be preserved for future generations, proactive planning and growth management is needed at the regional and local levels to promote sustainable development.

The need to manage growth to protect the Schuylkill River Valley’s cultural and natural resources is widely recognized and is being addressed by a variety of governmental planning and preservation initiatives at the state, county, and local levels. Examples include Pennsylvania’s Growing Greener and Statewide Greenways Programs,
as well agricultural conservation easement purchase programs in Berks, Chester, Montgomery, and Schuylkill Counties. In addition to government agencies, a number of private, nonprofit organizations are actively involved in heritage resource preservation within the River Valley. These organizations range from regional entities such as Natural Lands Trust to county nonprofits such as the Berks County Conservancy and Montgomery Lands Trust to watershed-based groups such as the French and Pickering Creeks Conservation Trust and Schuylkill Headwaters Association.

The Schuylkill River Valley National Heritage Area is not a regulatory initiative, nor can federal funds received through this program be used to acquire real property or an interest in real property. While there is no intent to dictate regional or local policy or legislation, a tremendous opportunity exists to build on current planning and preservation programs through voluntary partnerships involving public and private agencies, organizations, and citizens in the preservation and enhancement of heritage resources. Examples of these partnerships include:

• **Advocate for the protection of heritage resources and related open space areas determined to be regionally significant:** These efforts would pool the resources of federal, state, county, and local governments and private organizations in initiatives to protect important resources in targeted areas (e.g., intact agricultural landscapes, greenway corridors along the Schuylkill River and its tributaries, etc.). A variety of techniques to protect significant cultural, historical, and natural resources could be used by public and private sector heritage partners, such as public land acquisition or purchase of development rights on farmland, voluntary conservation easements by private landowners, and creative development options.

• **Support the implementation of land use plans that integrate heritage resource preservation and enhancement as policy recommendations:** As authorized by the Pennsylvania Municipalities Planning Code, neighboring communities could address heritage resource preservation at a regional level through cooperative inter-governmental agreements and the development of multi-municipal plans. State and county government and private organizations could provide funding, technical assistance, or other forms of support for these or similar efforts at a local municipal level. As an example, Chester and Montgomery Counties have active programs in place to provide technical and funding assistance to local municipalities in support of planning objectives such as preservation of open space and natural resources.

• **Evaluate the effects on heritage resources of projects of**
2.0 The Planning Alternatives

regional impact: Certain public or private development projects are of such scope or magnitude that they will have major ramifications for the Schuylkill River Valley’s future. For example, the Schuylkill Valley Metro, a 62-mile rail transit corridor planned between Philadelphia and Reading, has the potential to reduce automobile dependency and contribute to the revitalization of the heritage area’s urban communities. In another example, the Cabela’s outdoor superstore planned for the I-78/Route 61 interchange near the Berks/Schuylkill county line will provide a major local economic boost and supports the heritage-related theme of outdoor recreation, but could result in secondary development that impacts local communities with limited carrying capacity (e.g., Port Clinton). Interested organizations and agencies could come together on a project-by-project basis to proactively address such issues. This involvement could range from simple project endorsement and support to providing assistance to municipalities in planning to maximize the positive and minimize the negative effects of such projects on heritage resources.

2. EDUCATION AND INTERPRETATION

2A. Establish a consistent, area-wide framework for the interpretation of the Schuylkill River Valley’s heritage resources.

Heritage interpretation draws together historic preservation, tourism, and the “experience industries.” It interprets local culture and history and makes it accessible to the public by providing interpretive experiences for visitors and tourists. ⁵

Heritage interpretation is rooted in the authentic history of a place and embraced by the resident population. Indeed, effective interpretation is based on the premise that cultural storytelling is aimed first at the resident population, then at visitors from other places.

The three primary interpretive themes described in Section 1.4 of this Management Plan are grounded in what has been termed “the new cultural history.” Many historians are interested not just in the facts of experience, but in how historical experiences were felt and understood by people in past times. These understandings, in turn, were expressed in stories and narratives that make sense out of the raw material of lived experience. The primary interpretive themes reflect the stories and narratives that are evident in local texts, images, sites, rituals, and reminiscences.

Adoption of primary interpretive themes that focus on history, community, and ecology is an essential beginning to implementing a consistent regional approach to interpretation of the Schuylkill River

⁵ Norman Tyler, Historic Preservation: An Introduction to Its History, Principles, and Practices
Valley’s heritage resources. Among the next steps will be to develop a framework for applying these themes in informational and interpretive materials and displays, including visual design standards (see Strategy 5A). This framework will guide how the primary themes can be incorporated at the site and resource levels and fleshed out through the development of sub-themes and related stories to the benefit of both individual sites and the heritage area as a whole. Within the overarching interpretive framework, institutions, sites, historic districts, parklands, and other heritage resources can develop a multiplicity of stories that attract users, engage their attention, and inform their awareness. Strategy 2B describes more specifically the application of the framework at the regional and local levels.

2B. Connect heritage sites and resources through interpretive themes and products.

The historical and cultural resources of the Schuylkill River Valley National Heritage Area are varied and significant. To enhance their attractiveness, to make them accessible, and to highlight their meaning and significance, thematically related sites and resources must be linked to one another through information services, publications, tours, events, etc. In fact, since this heritage area abuts others with resources that overlap or complement those of the Schuylkill River Valley, it makes sense to look beyond its borders to linkages with heritage resources in nearby regions.

The Management Plan preferred alternative (Alternative D) proposes to develop intersecting layers in the form of area-wide topics (experiences) and clusters of resources (places). These complementary approaches will require distinct modes of implementation and development. Connections must be integral to both approaches—at the regional level for experiential topics and at the local level for clusters. Building regional and local interpretive connections are discussed in turn below.

Regional Connections

Creating linkages among related heritage resources can begin most readily at the regional rather than the local level. The Schuylkill River Trail system is being implemented and can serve to link multiple sites along its route. Several topical linkages are also in place. Development of shared informational templates and visual design standards will also help to build regional identity and to connect related sites. Approaches that might be used to deepen current linkages and add new ones over time include:

- **Build on existing thematic programs:** The search for programmatic linkages is not starting from scratch. For example, the annual Schuylkill River Sojourn sponsored by SRGA links examples of existing physical and programmatic linkages:
  - Schuylkill River Water Trail
  - Molly Maguire Auto Tour
  - Maiden Creek Watershed Driving Tour
  - Schuylkill River Towns Driving Tour

Examples of existing physical and programmatic linkages:
several communities and their resources along the River. Chester County sponsors a coordinated series of tours and open houses that emphasize historic preservation. Auto tours focused on heritage topics have been developed in Schuylkill (Molly Maguires) and Berks (Maiden Creek Watershed, Schuylkill River Towns) Counties. A number of environmental education centers that share agendas and curricula are located in the heritage area.

Additional interpretive linkages could be readily organized, drawing on topically related sites and resources. Parks and arboreta within the Schuylkill River Valley provide access to a variety of landscapes. Historic house museums (guided tours) and historic districts (walking tours) can be linked to reflect similarities in contemporary sites or historical sequences of sites, while industrial and transportation sites can be linked to show the interrelated parts of different economic systems or the changing nature of successive economies. The Management Plan itself suggests a variety of ways to link heritage sites and resources by reading the landscapes of history.

- **Develop density along thematic linkages:** Developing thematic or experiential linkages might begin with segments that are modest in scope and require a moderate effort and commitment by residents and visitors to navigate. Extended linkages can easily overreach themselves and lose would-be visitors part-way. Shorter segments linking nearby clusters and providing clearly defined beginnings, middles, and ends are more likely to be effective building blocks in the long run than linkages that require people to travel from one end of the heritage area to another.

Once linkages are developed, it will become important to fill in the gaps that lie between scattered resources and sites. A wide range of programmatic components can be used to increase the density of visitor experiences between sites. Examples include audio tapes and brochures for self-guided thematic tours; trained guides and docents who can join tour groups between heritage sites to provide commentary, entertainment, local color, and reminiscences; interpretive signage; and waysides and overlooks that help to break up lengthy trips between distant resources. If there is one thing certain, no amount of research, planning, and other investment will make a thematic linkage effective if visitors are tired or hungry. Thus, visitor services, most especially rest stops and quality local restaurants, will be of critical importance in making linkages effective.

- **Develop partnerships with nearby heritage areas and other heritage resources of national significance:** The Schuylkill River Valley abuts other significant heritage areas and clusters of...
prominent heritage attractions. To the south lies the Brandywine River Valley with a host of well-known heritage attractions, such as Winterthur, Longwood Gardens, Hagley, Rockwood, and the Brandywine River Museum. To the north lie the Delaware & Lehigh National Heritage Corridor and the Lackawanna Valley National Heritage Area, which together contain numerous sites that complement those of the Schuylkill River Valley. At the lower end of the heritage area is the City of Philadelphia, which for decades has marketed itself as the site of Independence Hall and the Liberty Bell. Opportunities for joint interpretation and promotion among these various regions are numerous. For example, interpretive linkages could be strengthened between heritage resources/attractions in Philadelphia and the Schuylkill River Valley, with information on the Schuylkill River Valley as a heritage destination provided at the Independence Visitor Center. As called for by the congressional legislation that designated the Lackawanna Valley and Schuylkill River Valley National Heritage Areas, these two areas and the Delaware & Lehigh National Heritage Corridor should work together to tell the story of the culture and heritage of the anthracite coal region.

• **Promote awareness of heritage sites and attractions among local residents:** Because the Management Plan emphasizes engaging local residents and their visiting friends and relatives (VFRs) as well as heritage tourists, local resources make an especially important starting point for linkages. Nearby history is all too often overlooked, especially by local residents and agencies. Special events; feature articles and series in local print and broadcast media; neighborhood walking tours; and continuing education courses are all excellent vehicles for disseminating heritage awareness among local constituencies. Bringing history to the people and creating heritage appreciation among local residents is a key to creating larger regional linkages that depend upon awareness of local resources in the context of the heritage area as a whole. Educating and involving the media in informing the public about the importance of the River Valley’s heritage resources will be an important part of this effort.

Collaboration may be as simple as getting the local sites to display and distribute the brochures that are developed to link resources in different parts of the heritage area that express similar themes. Seasonal programs, special events, and celebrations sponsored by local sites and organizations can be coordinated to provide building blocks for thematic linkages. In Chester County, for example, the Mill at Anselma, Chester Springs Library, Historic Yellow Springs, Chester Springs Studio, and Green Valley Association’s Welkinweir collaborate in weekend special events.
Local Connections

The Schuylkill River Valley supports numerous constituencies and organizations that can benefit from participation in heritage area initiatives and programs. Each of these groups, however, has its own agenda, its own particular circumstances, and its own organizational culture, the conditions on which it focuses its attentions and energies. Thus the area-wide interpretive framework described in Strategy 2A must be integrated into the agendas and cultures of local groups if it is to be successful. Potential approaches to accomplishing this include:

- **Encourage partnerships among heritage resources within local clusters:** The Management Plan identifies a dozen places or clusters of heritage resources that could potentially become building blocks for interpretation. However, local heritage organizations often operate without much awareness of sister organizations in the same locale. On occasion, local organizations may join together for a special event or initiative, and sometimes they lend support to one another in the form of co-sponsorships. Developing a viable, effective interpretive framework at the local level will necessitate much more intensive, sustained interaction among sites and resources located within the clusters. Bringing local groups together for regular meetings and roundtable discussions will be an important step in developing effective, coordinated interpretation.

- **Promote familiarity with other heritage area resources:** Integrating interpretive themes at the local level might entail a series of round-robin visits or an all-day excursion so that staff and citizen leaders experience first-hand the other heritage resources in their local cluster. A next step might be for representatives of resources within a local cluster to make excursions outside of their own locale to visit heritage resources located within other heritage area clusters. In this way similar sites and organizations can become acquainted and begin to conceptualize how they can collaborate with one another in telling thematic stories; representatives of dissimilar resources may discover ways to complement each other.

- **Root the framework in local organizations:** Initial field visits might be followed by a series of planning meetings in which each resource contributes to the identification of stories, themes, and experiences that will enrich understanding of local narratives and the heritage area as a whole. Out of these planning sessions can come new initiatives, collaborative publications, and programs. Training sessions for institutional staff and volunteers will also be a useful tool in making the interpretive framework an integral part of each resource’s day-to-day awareness, operations, and activities.
Application of the interpretive framework at the regional and local levels will be an on-going, open-ended process, for which SRGA as the heritage area management entity will serve as catalyst and coordinator. Partnerships among regionally and locally based heritage sites and organizations will be essential in this process. Ultimately, full implementation of the interpretive framework, while regional in scope, will occur locally. When local heritage resources acquire ownership of the interpretive framework and primary themes and adapt them to their own institutional purposes, the framework will be transformed from words on paper to operational reality.

2C. Support educational and research initiatives that teach the public about the Schuylkill River Valley’s historical, cultural, and natural heritage.

Educating the public about the Schuylkill River Valley’s rich heritage resources will require a special kind of effort. Learning goes on throughout life, so the audience is potentially very large. Education means “to draw out” or elicit, so this strategy requires the sustained engagement of a population that is very diverse in age, background, and interests. To address this challenge, public educational and research efforts focusing on the Schuylkill River Valley’s heritage resources must involve a variety of partners and embrace the full range of prospective audiences. These efforts should build on the strong educational and research institutions and programs that currently exist in the region, with the objective of identifying “catalytic” projects and coordinating local initiatives that advance public understanding of the Schuylkill River Valley. Potential initiatives include:

- **Integrate the history of the Schuylkill River Valley into local school curricula:** Local history is mandated in the elementary grades by Pennsylvania law, meaning that every school district within the heritage area is already teaching some form of regional history. However, very little research and publication has been done on the Schuylkill River Valley as an historical region, so current teaching and learning generally cannot embrace the full range of heritage area stories and themes. Convening a group of area educators to organize a local history curriculum with a regional perspective can greatly strengthen public understanding of the Schuylkill River Valley’s history.

- **Build on existing environmental educational resources and programs:** The Schuylkill River Valley is rich in environmental education centers and nature preserves, and the story of reclaiming the River is one of the Management Plan’s three primary interpretive themes. The heritage area provides an opportunity for environmental educators, curriculum specialists, and scholars to promote an

The Center for Community Leadership at Albright College in Reading, the Pennsylvania German Archives and Studies at Ursinus College in Collegeville, and the Center for Sustainable Communities at the Temple University Ambler Campus are examples of local college resources that could be tapped for adult education programs, workshops for local officials, and other purposes.
informed, consistent interpretation of the regional environment, including the story of the continuing impacts of human activities on environmental resources. There is also rich potential to link and make more intensive use of heritage area resources and sites for experiential learning and discovery related to the Schuylkill River Valley's natural environment.

• **Take advantage of the region's institutions of higher education:** The heritage area and the Philadelphia metropolitan area support numerous universities and colleges offering rich potential for heritage-related research, interpretation, and public education. One possible route would be to work with area institutions to support gifted faculty in developing new courses on regional history, with a special emphasis on field studies. Modest, one-time grants would create recyclable courses that engage young adults, year after year. In addition, faculty who chose to prepare courses on area history would become important resources for curriculum development (see above); for continuing education, colloquia, and workshops; and for publications (see below).

• **Promote adult education programs focused on the Schuylkill River Valley:** Educational programs for adults can be developed in multiple forms. Many high schools and colleges offer continuing or lifelong education programs, including programs for parents of matriculated students and college alumni. If half a dozen outstanding faculty members of area colleges were to develop expertise on the region's history, they could offer a variety of continuing education courses of longer or shorter duration for diverse audiences. Additional resources might be found at universities such as Penn State (especially in cultural geography), the University of Pennsylvania, the University of Delaware, and Temple.

• **Utilize emerging technologies in public education efforts:** Recent innovations in telecommunications make it feasible to make use of a single teacher or lecture in multiple contexts. Lectures can be delivered to multiple sites (with interactive capabilities). Papers can be easily attached to websites and made available on-line. Links between websites enable browsers to find and enjoy historical materials on related resources. Chat rooms and other real-time electronic conversations encourage lively, free-ranging discussions.

• **Reach out to “local influentials”**: This inclusive category might include elected officials, leading educators, planning professionals, community activists, reporters for press and media, and board members of cultural and heritage institutions. The new Mid-Atlantic Center for the Humanities at Rutgers University, Camden (in collaboration with Temple University) has been exploring ways to
engage such persons in consideration of the humanities. It might be possible to develop a series of pilot programs that engage community influencers in discourse about the resources, sites, themes, and stories of the heritage area.

- Develop a lively, compelling, well-documented history of the Schuylkill River Valley: Commissioned in collaboration with a local college and/or one or another leading historical agency, this history could be developed in print and/or other media format, such as video or CD-ROM. Township histories are also needed, but are less useful for heritage area education if an overarching framework is lacking.

3. RECREATION

3A. Complete development of the Schuylkill River trail system, including connections to tributary trails.

The Schuylkill River and its tributaries provide the main continuous linkages among sites and resources throughout the heritage area. Since its inception the State Heritage Parks Program has focused on development of recreational land and water trails along the length of the Schuylkill River as a major priority. Considerable progress has been made in this effort. The entire length of the land trail from Philadelphia to Pottsville (with the exception of the Reading to Hamburg segment) has been completed, is funded and in design, or is under study. In a separate initiative, several organizations have partnered in the continuing development of the Schuylkill River Water Trail, a system of boat landings and parks providing public access to the River. A detailed informational pamphlet – the Schuylkill River Water Trail Guide–has been prepared for this system.

With regard to tributary trails, Montgomery County is completing a continuous trail along the Perkiomen Creek from the Schuylkill River to Green Lane Reservoir. Another significant segment is in place along the Tulpehocken Creek in the vicinity of the Berks County Heritage Center.

Completing the Schuylkill River land and water trail systems will continue to be a major priority for the heritage area. Land trail development efforts should include moving the Reading to Hamburg section forward, adding on to and completing key gaps between existing trail segments, and connecting to trails along tributary streams (e.g., Tulpehocken Creek). Water trail development efforts should continue to upgrade existing landings and establish new ones in environmentally appropriate locations.

Providing linkages from the recreational trails to cultural and natural resources through interpretive trails (coordinated informational packets, interpretive exhibits, and trail markers) should be another focus.
of Schuylkill River trail system development. Prime candidates include:

- Remaining vestiges of the **Schuylkill Navigation Canal**, such as the Allegheny Aqueduct and Felix Dam in Berks County, Frick's Lock Village in Chester County, the Oakes Reach section in Montgomery County, and Manayunk Canal in Philadelphia

- Basins and related facilities developed for the **Schuylkill River Desilting Project** (e.g., Black Rock Preserve Interpretation Trail in Chester County), which have both recreational and interpretive potential due to their role in a nationally significant environmental restoration project

- Establishment of a **birding trail** (see Resource Conservation and Enhancement Strategy 1B)

Valley Forge National Historical Park provides a good example of how the Schuylkill River recreational trail system can connect to heritage resource interpretation. Despite the fact that it is the terminus of two major trails (the Valley Forge to Philadelphia Trail and the Horseshoe Trail that runs west to the Appalachian Trail north of Hershey), currently there is limited interaction between the park's historic and recreational resources. The Betzwood picnic area, for example, is a major recreational attraction located along the Schuylkill River Trail but lacks installations (kiosks, signage, etc.) providing information on historic resources and interpretive facilities elsewhere in the park.

The planned development of the National Center for the American Revolution could provide the impetus for an initiative to better connect the park's historical and recreational resources and to interpret them in the context of the larger Schuylkill River Valley National Heritage Area. This initiative would involve the National Park Service, National Center, and SRGA as primary partners.

**3B. Enhance existing and provide new outdoor recreational opportunities related to the Schuylkill River Valley’s natural and cultural heritage.**

Outdoor recreation tied to the Schuylkill River Valley’s natural resources is a major heritage area attraction. Recreational activities such as hiking, biking, fishing, hunting, and nature observation draw visitors and raise the quality of life for residents. Strategy 3A addresses the Schuylkill River Valley trail system, which is emerging as a major regional recreational resource. As described in Section 3.3, other regionally important recreational resources include the Appalachian and Horseshoe Trails; state gamelands, forest, and parks; Hawk Mountain Sanctuary; Blue Marsh Lake; and regional parks such as Fairmount Park and Green Lane Reservoir. These resources provide opportunities to attract visitors from inside and outside the Schuylkill River Valley who
have a special interest in outdoor recreation or who may be interested in combining historical and cultural experiences with recreational/nature-oriented activities.

Characterized by extensive forests, state parks, and state gamelands, the Ridge and Valley landscapes of northern Berks and Schuylkill Counties are particularly well suited to supporting increased outdoor recreational activity that attracts visitors and contributes to the local economy. Momentum will be provided by the Cabela's superstore planned for the I-78/Route 61 interchange, in close proximity to the Appalachian Trail. This store will be a major attraction that draws visitors from a large market area extending well beyond the heritage area. Specific actions that can be taken to enhance existing and provide new outdoor recreational opportunities include:

- **Explore opportunities to make publicly owned properties that are not currently accessible or have restricted access open to the public.** Lake Ontelaunee in Berks County and Owl Creek Reservoir in Schuylkill County are examples of scenic properties that are not currently accessible but which could potentially be opened up for some degree of recreational usage in cooperation with their respective owners (the Reading Water Authority and Tamaqua Water Authority). In another example, the state gamelands (including over 18,000 acres in Berks, over 31,000 acres in Schuylkill County, and additional lands in Chester and Montgomery Counties) afford significant opportunities for enhanced recreational visitation. The 2001 *North Berks Land Utilization/Reconnections Planning Study*, sponsored by SRGA and the North Berks Recreation Corporation, provides another example of the potential that exists. This study recommends public access and recreational improvements to the 252-acre Kernsville Dam Impounding Basin Site, a site next to Hamburg managed by the Pennsylvania Bureau of Abandoned Mines and Reclamation. Other desilting basins managed by the State offer similar opportunities for enhanced public access and recreation.

- **Support land conservation efforts to build integrated networks of protected lands that support natural habitat and related recreational activities.** From the standpoint of the heritage area, the priority should be on preserving properties of regional significance, such as large natural habitat areas or greenway corridors along the Schuylkill River and its major tributaries. Berks, Chester, and Montgomery Counties have completed open space plans that can provide guidance for this effort in those three counties. The 1996 *Montgomery County Open Space Plan: Creating an Open Space Legacy*, for example, identifies lands with over 1,000 acres of contiguous habitat and four major greenways (Schuylkill River and the Perkiomen, Pennypack, and Wissahickon Creeks) as priorities for
preservation. Chester County’s 2002 *Linking Landscapes: A Plan for the Protected Open Space Network in Chester County, PA* recommends that 5,000 acres a year be protected throughout the county through conservation easements by private landowners or by public in-fee acquisition. The Commonwealth of Pennsylvania can also play a major role in protecting lands for outdoor recreation purposes, as in the recent acquisition of property in Schuylkill County from the Atlas Powder Company to augment state gamelands.

- **Continue water quality improvements to promote healthy fisheries throughout the Schuylkill River Valley:** Fishing is a major recreational draw in the heritage area that has greatly benefited from water quality restoration efforts such as acid mine drainage treatment projects. Water quality improvement initiatives that contribute to maintaining and improving fisheries throughout the Schuylkill River Valley should continue.

- **Promote the Schuylkill River Valley’s outdoor recreational resources in heritage area marketing efforts.** The Schuylkill River Valley is already well known for outdoor recreational activities ranging from hiking and biking along the Schuylkill River in Philadelphia and Montgomery County to hunting and fishing in Schuylkill County. Heritage area marketing efforts would benefit from targeting these resources for prospective visitors and linking them to other heritage attractions and resources.

4. **COMMUNITY REVITALIZATION**

**4A. Conserve and use heritage resources to foster sustainable economic activity in traditional centers.**

Much of the Schuylkill River Valley’s history and heritage is embodied in its traditional centers of human settlement. These centers range in size from small hamlets and villages to larger boroughs and (in the case of Philadelphia) a major city of 1.5 million, and in historical function from agricultural service centers to manufacturing hubs to railroad towns to river ports.

Each of the heritage area’s five counties has multiple historic cities, boroughs, and/or smaller settlements that have long served as centers of activity and commerce for larger areas. Along the Schuylkill River, there are numerous historic industrial and service center communities dating back to colonial days. Places such as Pottsville, Reading, Pottstown, Phoenixville, and Norristown owe their existence to being located on the river and grew to prominence for that reason. Due to the concurrent trends of loss of industry and suburban sprawl, many of these centers have experienced economic and physical decline. However, these centers still possess rich heritage resources such as
historic buildings, traditional downtowns, and riverfronts. In other communities around the country, heritage resources have been used to encourage reinvestment and revitalization through heritage tourism and by attracting residents to the authentic quality of life created by such resources.

Philadelphia’s Manayunk is one well-known, successful example of using historic sites and themes to generate economic activity in the Schuylkill River Valley National Heritage Area. Manayunk has experienced success in adaptively reusing historic structures for modern uses, resulting in the restructuring of the local economy around retail/visitor spending. In another example, the Yuengling Brewery tour in Pottsville draws about 45,000 visitors per year, about half of whom come from out of state. These visitors are drawn by the history of America’s oldest active brewery and come to Pottsville to experience it. However, the economic development potential of heritage resources has been largely unrealized in most communities in the more rural parts of the heritage area.

In small towns and rural areas throughout the country, concerted efforts have been undertaken to translate historic buildings and sites, natural environments, and recreational resources into economic development engines. One nearby example is Jim Thorpe, located in the adjacent Delaware and Lehigh National Heritage Corridor in Carbon County, which has used its historic building stock, beautiful natural setting in the foothills of the Poconos, and proximity to both New York and Philadelphia to become a specialty retail destination. Lowell, MA is an example of a community that has used its industrial heritage to promote tourism and related economic development.

There are literally dozens of other examples of small towns throughout the country that have similarly capitalized on heritage resources to improve the local economy and quality of life. Many communities throughout the Schuylkill River Valley have the potential to enact such transformations. To do so, these communities need to:

1. Identify a particular niche based upon the nature and extent of the heritage resources within the community.

2. Put in place economic development strategies that capture the benefits of the identified niche.

There are four general types of heritage resources to consider in developing such a niche:

- **Historic buildings and sites**: Historic resources can function as visitor attractions or can be adaptively reused for new uses that contribute to community revitalization efforts.
• **Natural environments:** Waterfronts and other natural features can contribute to local community revitalization, particularly when public access is provided. Major opportunities exist for communities such as Conshohocken, Norristown, Phoenixville, and Pottsville to connect their downtown areas to the Schuylkill River waterfront.

• **Recreational resources:** Development of the Schuylkill River Trail system will create economic opportunities for a number of heritage area communities. Historic river towns are logical locations for trailheads and landings because they once hosted railroad stations and canal ports.

• **Local culture and stories:** The legacy of the Molly Maguires in Schuylkill County is an example of a compelling story that is being used to attract heritage visitors and contribute to local pride and community identity.

Capitalizing on different types of heritage resources will necessitate differing methods of fostering economic development. However, the overall approach and the general goal will be the same: to use existing historic, natural, recreational, or cultural resources to foster sustainable economic development. In this definition, “sustainable” signifies two primary characteristics:

1. Economic activity can be maintained well into the future.
2. Economic activity is respectful of heritage resources.

Examples of specific action steps that can be undertaken to pursue sustainable economic development in Schuylkill River Valley communities include:

• **Create a checklist of heritage resources:** Some localities may not be aware of exactly what is meant by heritage resources from the standpoint of sustainable economic development. A “checklist” of heritage resources could be developed and made available to local governments and/or economic development interests. This checklist could be used by local interests to help document heritage resources, thus providing a basis for understanding assets and challenges inherent in planning for heritage-related economic development.

• **Provide a database of relevant case studies:** Once communities have identified key assets, the next step is to help them conceptualize what can be done to capitalize on these resources. As mentioned above, many localities around the country have used heritage tourism as an economic development tool, providing an abundance of case studies. A summary of these case studies could be compiled and made available to local communities.
• **Secure grants and loans for heritage-related revitalization initiatives:** Millions of dollars in grants and loans for the preservation and reuse of heritage resources are available from federal, state, and regional programs, ranging from historic preservation tax credits to economic incentives for small businesses to community development grant programs (see Appendix A). These funding sources could be used for heritage-related revitalization initiatives in local communities within the Schuylkill River Valley National Heritage Area. Examples of such initiatives include the rehabilitation of significant historic properties or urban design improvements to enhance the character of and stimulate private investment in traditional downtowns or other historic centers. Similar to the checklist and database, information on these programs and how they contribute to achieving community revitalization could be compiled and made available to local communities within the heritage area.

4B. **Promote entrepreneurial activity and small business development related to the Schuylkill River Valley’s heritage resources.**

In considering the community revitalization prospects for the Schuylkill River Valley National Heritage Area, a major concern is the quality of jobs created by additional heritage tourism activities. Tourism jobs are often stereotyped as low-wage ones that are usually filled by young and/or unskilled workers, and this may be true if the bulk of the jobs consist of positions such as counter help and maintenance staff. However, growth in the tourism industry does not have to fit the stereotype, and heritage tourism offers many opportunities to foster entrepreneurship in the region. Heritage tourism is, by definition, aimed at providing unique experiences to travelers:

*Heritage tourism is* traveling to experience the places and activities that authentically represent the stories and people of the past.

In the context of business development, this means quaint inns, local restaurants and shops, non-traditional recreational opportunities, and one-of-a-kind visitor attractions. In order to provide these experiences, new businesses can (and indeed must) be started up.

At the present time, small business development tied to heritage tourism has been fairly limited in the region. In the urban areas of the Schuylkill River Valley (Philadelphia, Valley Forge, Reading), the restaurants, hotels, and shopping destinations serving tourists tend to be large in scale and are often part of national chains. In the more rural parts of the region, there are fewer resources for tourists, and those

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*National Heritage Tourism Research Forum, 1997*
that do exist, even in the more remote areas of Schuylkill and Berks Counties, are also often part of national chains.

Regionally, there are a number of regional and local business and economic development organizations within the heritage area that fulfill many different functions, such as developing industrial parks, workforce training, and administering economic incentives. Currently, these organizations do not focus on creating jobs and businesses based on heritage tourism. Business and job creation will continue to be the responsibility of regional and local economic development agencies. However, the Schuylkill River Valley National Heritage Area provides an opportunity to supplement these efforts by fostering the creation of businesses to serve the heritage tourism market. This will largely be accomplished through plan strategies that result in increased visitation through new or enhanced products, linkages, and marketing (e.g., 2B, 5B, and 5C). Increased visitation, in turn, will stimulate the creation of heritage-related business, thus enhancing the vitality of local economies. Other potential actions include:

- **Help identify market niches**: Tourism and economic development interests could come together to inventory tourism-related businesses that are currently lacking in portions of the heritage area, thus providing the basis for targeting market niches with potential. Tourism marketing agencies keep tabs on what visitors would like to see in an area, and lines of communication could be established to pass this information along to business development groups.

- **Co-sponsor informational sessions**: To help get the word out on heritage-related business opportunities and available resources, informational sessions on starting tourist-related could be sponsored by tourism marketing, business, and economic development interests. These sessions could be held in a number of different locations around the region.

5. HERITAGE TOURISM

5A. **Use a distinct visual image and identity in the design of heritage area products such as informational materials, signage, and interpretive exhibits.**

Increasing heritage tourism depends first and foremost on raising public awareness of the Schuylkill River Valley National Heritage Area. Currently the heritage area has a low profile among the general public. Strategy 5C below describes public relations and marketing programs that can be undertaken to raise awareness of the heritage area, its attractions, and its resources, beginning with residents of the region. As part of this effort, a distinct visual image should be used to help “brand” the heritage area in the minds of the public. The existing logo
developed by SRGA provides the basis for establishing a recognizable image. To promote a distinct visual identity for the heritage area, the logo should be used together with consistent guidelines for other design elements (color, font, materials, etc.) in the design of physical materials such as informational brochures, wayfinding/identification signage, and interpretive exhibits. Specific steps that should be taken to implement this strategy include:

1. Develop prototypical designs for heritage area graphic products, including informational brochures, signage, and interpretive exhibits.

2. Develop a model informational brochure based upon the prototypical design.

3. Implement model signage and interpretive exhibit installations at high visibility locations to illustrate how the prototypical designs can be applied to heritage area attractions and resources.

4. Work with attractions and organizations throughout the heritage area, including the Pennsylvania Department of Transportation, to integrate the logo and design guidelines into graphic products and installations that support the message and themes of the Schuylkill River Valley National Heritage Area.

5B. Develop physical and programmatic linkages between heritage area destinations to assist visitors in experiencing the Schuylkill River Valley's diverse resources.

The size and complexity of the Schuylkill River Valley National Heritage Area highlight the need to connect diverse heritage attractions and resources if the heritage area is to realize its full potential. From a heritage tourism standpoint, the purpose of this strategy is to entice visitors to stay longer, visit multiple destinations, and make repeat visits, thus spending more money for the benefit of local communities. Two general types of linkages can be developed:

- **Physical linkages,** such as walking/biking trails, designated scenic roads that link different heritage area communities and attractions, excursion trains or boats, etc.

- **Programmatic linkages,** such as sample itineraries and marketing packages involving heritage attractions and private businesses, audio walking/driving tours, informational materials linking sites and resources related to special interest topics, coordinated festival and special event schedules, etc.

While the emphasis of the Schuylkill River Valley National Heritage Area is on regional connections, linkages can be developed at the local level as well. Key regional connections include trails along the Schuylkill
River and its tributaries (Strategy 3A) and other types of physical and programmatic linkages that tie together sites, communities, and resources located throughout the heritage area. At the local level, physical and programmatic linkages can enhance visitor appeal by increasing the perceived density of heritage experiences. Examples include walking routes demarcated by signage and brochures highlighting local attractions and businesses.

In developing physical and programmatic linkages, visitor orientation points or gateways will be important facilities that connect local places/clusters of heritage resources to the larger heritage area. These gateways will be relatively small but publicly visible and accessible spaces that display and distribute information on the heritage area. Typically they will not be independently staffed but will be located as part of a larger facility operated by a local heritage partner. Heritage area gateways currently exist or are under development in Pottstown (SRGA headquarters), Phoenixville (larger than typical, Foundry Building renovation), Mahanoy City (storefront), and Tamaqua (train station renovation). Additional gateways should be developed in key places to orient visitors to both the larger heritage area and to local heritage resources and attractions. Consistent standards for gateway signage and displays should be included in the visual design framework that will be developed for the heritage area (Strategy 5A).

5C. Promote awareness of and increase visitation in the Schuylkill River Valley National Heritage Area through public relations and marketing programs.

Developing a regional marketing and promotional strategy is critical to achieving the heritage tourism goal. To be effective this strategy should work through existing organizations involved in tourism promotion in the Schuylkill River Valley, capitalize on new marketing and promotional opportunities provided by the Schuylkill River Valley National Heritage Area, and identify specific marketing and promotional tools that can be used to implement the strategy.

It should be noted at the onset that significant marketing expertise and resources are already in place within the Schuylkill River Valley. Each of the five counties has an active convention and visitors bureau involved in promoting tourism. Several of these organizations have significant financial resources, particularly those in the more developed, urbanized portions of the corridor. At the same time, however, the various organizations have different marketing and promotional priorities. In Schuylkill County, for example, outdoor recreation is the principal promotional focus, while in Berks County the focus shifts to outlet shopping. In Montgomery (Valley Forge) and Philadelphia Counties, the priorities are non-river related historic resources. Historically,
heritage tourism in general and the Schuylkill River in particular have not been considered a high priority among many of these jurisdictions.

Another factor that affects the marketing of the Schuylkill River Valley National Heritage Area, particularly in its northwest portion, is the geographic definition of state marketing regions and of other national/state heritage areas. For example, Schuylkill County’s natural partners in promoting outdoor recreation are other tourism marketing regions such as the Poconos. Similarly, its strongest partners in the promotion of coal heritage are the adjacent Lackawanna Valley and Delaware and Lehigh National Heritage Areas, rather than other jurisdictions within the Schuylkill River Valley.

In spite of the issues identified above, the overall outlook for enhanced promotion of the Schuylkill River Valley National Heritage Area is very positive. There are significant financial and non-financial resources in place that can be tapped for the benefit of the heritage area. The region’s marketing organizations have expressed an interest in expanding the emphasis on heritage tourism and there is a significant base of potential visitation, including both residents and visitors from outside the region.

The overall marketing and promotional strategy for the Schuylkill River Valley National Heritage Area should be to establish the **heritage area brand**, and to build brand identity by working with and through existing regional organizations. Put another way, the main objective of marketing and promotion should be to increase awareness of the heritage area and its attractions. Actions that can be taken to help this objective include:

- **Continue to develop the Schuylkill River Valley National Heritage Area website**: The current website managed by SRGA, www.schuylkillriver.org, provides a good orientation to the heritage area, including links to heritage resources and attractions within the region. This website could be further improved to include expanded information and linkages. Similarly, the websites of heritage area attractions and resources should include readily accessible information and links to the central SRGA website.

- **Conduct regional market research**: Based upon the Market Analysis conducted for the Management Plan (Appendix C), the primary target for the marketing and promotion strategy is the resident market of the five heritage area counties, including visiting friends and relatives. The secondary target is visitors from outside the region, particularly from the New York and Washington/Baltimore metropolitan areas. Additional market research should be conducted to further refine and identify target markets, to ensure the best use of marketing and promotional resources.

The Market Analysis indicates that residents of the five heritage area counties, including visiting friends and relatives, comprise the primary heritage area market (i.e., with the greatest immediate potential for development). The secondary market—which can be tapped as the heritage area grows in recognition—consists of visitors from outside the heritage area, particularly nearby metropolitan areas.
• **Develop outreach programs such as a regional speakers bureau and attracting travel journalists:** A major strength of the heritage area resides in its wealth of site managers, representatives of agencies and organizations, and other individuals knowledgeable in the region's heritage. A “speakers bureau” would tap this resource through lectures and presentations on heritage topics geared towards interested members of the public. Outreach efforts could include attracting regional and national travel journalists to visit and write about the Schuylkill River Valley National Heritage Area.

• **Create visitor packages:** Sample visitor itineraries and packages should be prepared and distributed through regional tourism promotion agencies. These products will facilitate visitor access to heritage-related attractions and businesses and provide a stronger critical mass of products by linking these attractions and businesses to provide cohesive visitor experiences.

• **Develop informational materials to appeal to visitors with special interests:** Informational materials (printed and online) should be developed for major special interest topics such as industrial history, coal/mining history, outdoor recreation, etc. These materials can be used by tourism promotion agencies and other entities involved in heritage tourism to help promote the attractions and resources available in the heritage area.

• **Establish a marketing database and direct marketing initiative:** Heritage tourism attractions and organizations in the region could work together to create a database of visitors to the area, with particular attention to capturing email addresses. As specific opportunities arise (e.g., special events), information could be e-mailed to past visitors in the hopes of enticing them to make a return visit. (Research has shown that it is much easier to generate a return visit than it is to generate an initial visit to an area.)

• **Establish an enhanced public relations function within the SRGA:** One of the most effective tools in creating and maintaining awareness is public relations and, in the context of this plan, media coverage. To help increase the public visibility of the heritage area, the SRGA should establish an expanded staff communications function with a special focus on media relations, including such responsibilities as collecting newsworthy information, helping to craft press releases, and distributing the releases to print and broadcast media.
2.2.2 Implementation and Management

A. Principles for Implementation

A broad array of public and private sector agencies, organizations, and institutions will be involved in implementing the Management Plan. SRGA, the management entity for the Schuylkill River Valley National Heritage Area designated by Congress, will lead this effort, with the National Park Service and the Pennsylvania Department of Conservation and Natural Resources (administrator of the Pennsylvania Heritage Parks Program) as key cooperating agencies. Plan implementation will build upon the successes achieved by SRGA and its heritage partners in implementing the 1995 Management Action Plan for the Schuylkill Heritage Corridor, as well as the work of other agencies and organizations involved in heritage preservation and development in the Schuylkill River Valley. Four overarching principles will guide implementation of the Management Plan:

1. **Partnerships:** Implement the Plan through collaborative partnerships involving the SRGA; federal, state, county, and local government; and private organizations, institutions, and businesses.

2. **Linkages:** Establish a variety of programmatic and physical connections among sites, attractions, and resources throughout the heritage area.

3. **Regional Impact:** Focus on programs and actions that will most effectively build a regional identity for and increase visitation within the Schuylkill River Valley National Heritage Area.

4. **Sense of Place:** Enhance the quality of life of local communities through the conservation and development of heritage resources.

As made clear by the discussion of plan strategies in Section 2.2.1, the heritage area mission and goals cannot be realized through independent action by SRGA, government, and other heritage organizations and institutions in the Schuylkill River Valley. Thus **partnerships** must be pursued at every level to maximize and leverage use of available financial, human, and organizational resources. **Linkages** are essential to tie together the Schuylkill River Valley's geographically and thematically diverse resources and to build a cohesive identity for the heritage area. Towards this end, implementation efforts should focus on those programs and actions that have the greatest **regional impact** based upon significance and contribution to increasing public awareness of the heritage area and its resources. At the same time, plan implementation must create tangible
benefits for communities throughout the heritage area, by enhancing local quality of life and **sense of place**.

**B. Project Evaluation Criteria**

Maximizing use of the additional resources made available through National Heritage Area designation will be critical to successful realization of the Management Plan. The following evaluation criteria are proposed as a guide for assessing the importance of potential heritage programs, actions, and projects under consideration for implementation. A three-step evaluation system is proposed:

1. Measure the project against the Management Plan **goals**.
2. Measure the project against the Management Plan **implementation principles**.
3. Assess the **quality** of the potential project.

**Step One: Management Plan Goals**

The project must contribute to achieving at least one (and preferably more than one) of the Management Plan goals, as follows:

**Resource Preservation and Enhancement**
- The project will preserve or enhance a historical, cultural, and/or natural resource(s) of regional significance.

**Education and Interpretation**
- The project will increase public understanding and awareness of a significant heritage resource(s) and related stories.

**Recreation**
- The project will provide a significant outdoor recreational opportunity related to the Schuylkill River Valley's natural and cultural heritage.

**Community Revitalization**
- The project will make a significant contribution to revitalizing a local community through conservation and sustainable use of a heritage resource(s).

**Heritage Tourism**
- The project will significantly increase visitation to a heritage site(s) or resource(s), resulting in associated economic benefits.

If the project is determined to meet one or more of the above criteria, the evaluation process proceeds to Steps Two and Three.
Step Two: Management Plan Implementation Principles

The project must exemplify the implementation principles to a high degree, as measured by the following criteria:

Partnerships

- The project involves and leverages the resources of two or more partners.
- A sponsoring partner(s) with sufficient capacity will participate in implementing the project and will manage it following implementation.

Linkages

- The project relates to one or more of the interpretive themes: Making History, Creating Community, and Reclaiming the River.
- The project involves physical and/or programmatic connections between multiple heritage area sites or resources, with the highest priority placed on linkages to the Schuylkill River and its tributaries.

Regional Impact

- The project involves a site(s) or resource(s) of historical, cultural, recreational, and/or environmental regional significance.
- The project will significantly increase visitation.
- Infrastructure is in place or can be developed to accommodate the increased visitation.
- The project is consistent with and contributes to implementing the recommendations of regional plans (e.g., Schuylkill River Watershed Conservation Plan, Montgomery County Schuylkill River Greenway Stewardship Study, and Chester County Landscapes) related to heritage resource preservation and development.

Sense of Place

- The project will improve quality of life at the local level through benefits such as sustainable economic development, preservation or restoration of valuable resources, and/or increased community identity and pride.
- The project is consistent with the recommendations of local governmental plans related to heritage resource preservation and development.
- The project will not have significant adverse effects on or exceed the carrying capacity of historical, cultural, recreational, and/or environmental resources.
A project will rate more highly based upon the number of the above criteria that apply, although it does not necessarily have to meet all of them. Criteria that must be met by all projects include:

- **Partnerships**: both criteria
- **Linkages**: relationship to interpretive themes
- **Regional Impact**: regional significance
- **Sense of Place**: carrying capacity

### Step Three: Quality

The project must exhibit a high degree of quality, as measured by the following criteria:

- It displays a high level of **authenticity** in its treatment of heritage resources.
- It embodies high standards of **planning and design**.
- It incorporates the heritage area **branding** set by the area-wide informational framework and visual design standards.

### C. Management

As the management organization for the Schuylkill River Valley National Heritage Area, SRGA will function as a catalyst for implementation by mobilizing the partnerships needed to put the plan strategies into action. SRGA was formed in 1978 as a 501(c)(3) non-profit organization with a primary goal “to create in time a green corridor along the Schuylkill from Philadelphia up past Reading, Port Clinton and beyond.” SRGA assumed a regional leadership role in the designation of the Schuylkill River Heritage Corridor as a Pennsylvania Heritage Park in 1995. SRGA has managed the Schuylkill River Heritage Corridor since 1995, during which time it has administered 91 projects that have brought a total of approximately $2.1 million in Heritage Parks Program funds to the region.

In assuming the expanded role of managing the Schuylkill River Valley National Heritage Area in addition to the Schuylkill River Heritage Corridor, SRGA will continue to be guided by its established vision and mission:
Vision

We envision a Schuylkill River region fully revitalized and restored: A region whose citizens understand, value and are fully committed to preserving and sustaining their cultural heritage and natural environment for future generations.

Mission

Our mission is to inform, coordinate, lead and assist communities, organizations and citizens achieve the stated vision.

This vision and mission will guide the long-range planning and day-to-day operational activities of SRGA in its function as the primary advocate for development of the Schuylkill River Valley National Heritage Area. SRGA’s participation in specific heritage development projects and programs will be partnership-based, with its specific role varying according to the nature and area-wide importance of the project or program as follows:

1. The SRGA will lead programs and projects that:
   - rank highly when measured by the project evaluation criteria, and
   - are beyond the capabilities of other heritage partners to lead due to their geographic and/or programmatic scope.

   Examples include completion of the Schuylkill River Trail System and development of a heritage area-wide framework for interpretive/informational materials.

2. The SRGA will initiate and coordinate programs and projects that:
   - rank highly when measured by the project evaluation criteria,
   - require an organization with broad interests in the heritage area to take an active role in getting them started (“catalytic” role), and
   - are of a scope and nature that lend themselves to execution by another heritage partner or a coalition of partners that pools their organizational skills and resources.

   Examples include a watershed-wide water quality monitoring and development and implementation of preservation/visitor interpretation plans for regionally significant resources such as the St. Nicholas Coal Breaker.
3. The SRGA will support programs and projects that:
   
   - make significant contributions to achieving the heritage area mission and goals but rank less highly when measured by the project evaluation criteria, and
   
   - are initiated and implemented by other heritage partner(s).

   Examples include open space or agricultural preservation programs that contribute to preserving local cultural landscapes within the heritage area.

   The Schuylkill River Watershed Network, comprised of heritage and environmental organizations operating within the Schuylkill River watershed, will be a primary management mechanism for carrying out the partnerships needed to implement the Plan. Coordinated by SRGA, this network will bring public and private heritage partners together to work cooperatively on projects of watershed-wide significance, thus leveraging and maximizing the use of the financial and human resources available to the individual agencies and organizations. The network will operate through task forces formed to plan and implement priority, large-scale projects, such as a watershed-wide water quality monitoring program. The task force will design the project scope, form a project team comprised of the appropriate partners from inside and outside the Network, and identify outside resources as required.

   The expanded responsibilities associated with managing the Schuylkill River Valley National Heritage Area and the Schuylkill River Watershed Network will require SRGA to increase its staff resources. Specific capabilities that are needed include:

   - **Network Coordination:** This capability is needed to support the Schuylkill River Watershed Network and to work with partner organizations to develop, administer, and implement Network projects and programs.

   - **Communications:** An expanded communications capability is needed for plan strategies and actions such as developing an enhanced heritage area website, developing an enhanced public relations strategy, and supporting the Schuylkill River Watershed Network.

   - **Landscape Architecture:** Landscape architectural expertise is needed for the management of heritage resource development projects to ensure adherence to high standards of planning and design.

   **D. Priority Action Programs**

   The plan strategies describe a wide range of initiatives, programs, and actions that can be carried out through partnerships to achieve the
heritage area mission and goals. Several action programs have been identified as priorities to be pursued by SRGA and its partners in the first two years of plan implementation. These priority action programs are identified in Table 2-2 along with order-of-magnitude estimates of required funding levels. These estimates are not meant to be definitive, but rather to provide an idea of the level of financial resources that will be required to implement the action programs.

E. Plan Monitoring

The priority action programs listed in Table 2-2 provide the starting point for efforts by SRGA and its heritage partners to implement the Management Plan. They represent the “tip of the iceberg” of the myriad of actions taken and decisions made over time by organizations, institutions, and local, county, state, and federal governments that will contribute to realizing the mission and goals for the Schuylkill River Valley National Heritage Area. The Plan is not intended to provide a prescriptive schedule for these actions and decisions, but rather to be a flexible and adaptive guide for informed decision-making on the projects and initiatives that are most important to the heritage area’s future as implementation moves forward. This basic purpose underscores the need for an ongoing monitoring process to measure success in achieving the heritage area mission and goals.

The plan horizon is ten years (until 2013), at which time a new plan will be prepared or other action taken in anticipation of the “sunsetting” of the authorizing legislation in 2015. The primary focus for plan monitoring by SRGA during this timeframe will be an annual review of progress made in working towards the Management Plan goals, to include the following steps:

1. Assess progress made in implementing the priority action programs over the previous year.
2. Measure progress in achieving the plan goals based upon defined indicators.
3. Develop a revised schedule of priority action programs based upon the previous two steps.
4. A more comprehensive assessment of progress made and update of the Management Plan should be conducted at the end of the first five years.

The following are examples of indicators or performance measures that can be used to assess progress in achieving the heritage area goals:

Resource Preservation and Enhancement

- Listed historic resources and districts
- Historic resource restorations and adaptive reuses
### Table 2-2. Priority Action Programs

<table>
<thead>
<tr>
<th>PROGRAM/ACTION</th>
<th>RELEVANT STRATEGY</th>
<th>ESTIMATED COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop programmatic linkages to build the regional identity and image of the heritage area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Enhance the heritage area website</td>
<td>5C</td>
<td>$100,000</td>
</tr>
<tr>
<td>• Develop a visual design framework and standards to “brand” the heritage area</td>
<td>5A</td>
<td>$50,000</td>
</tr>
<tr>
<td>• Using the visual design framework, develop a prototypical design for wayfinding signage and implement model installations at key locations</td>
<td>5A</td>
<td>$200,000</td>
</tr>
<tr>
<td>• Using the visual design framework, develop a prototypical design/layout for informational materials and implement a model informational brochure(s)</td>
<td>5A</td>
<td>$50,000</td>
</tr>
<tr>
<td>• Using the visual design framework, develop a prototypical design for interpretive exhibits and implement a model exhibit(s) at a key heritage resource(s)</td>
<td>5A</td>
<td>$300,000</td>
</tr>
<tr>
<td>2. Work toward completion of the Schuylkill River Trail System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Recreational trail:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Develop a feasibility study/design for the Reading to Hamburg section</td>
<td>3A</td>
<td>$700,000</td>
</tr>
<tr>
<td>– Complete selected critical gaps in the Schuylkill River Trail and connections to tributary trails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Water trail:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Establish new landings and upgrade existing ones at multiple locations along the Schuylkill River</td>
<td>3A</td>
<td>$300,000</td>
</tr>
<tr>
<td>• Interpretive trails:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Develop a plan for a Schuylkill Canal Interpretive Trail and begin implementation, possibly including as early actions an informational brochure and model interpretive installation in coordination with Action Program</td>
<td>3A, 1B</td>
<td>$300,000</td>
</tr>
<tr>
<td>– Develop a template for a birding trail (model trail guide and informational packet)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Continue to develop a heritage area gateway system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identify and move forward with gateways at five locations, modeled after existing installations</td>
<td>5B</td>
<td>$400,000</td>
</tr>
<tr>
<td>4. Work through the Schuylkill River Watershed Network or other partnership arrangements to initiate at least two additional projects of area-wide significance. The following are provided as examples:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Design and begin implementing a watershed-wide water quality monitoring program</td>
<td>1B</td>
<td>$350,000</td>
</tr>
<tr>
<td>• Work with the property owner and the community to develop a feasibility study, economic assessment, and plan for the future use/interpretation of the St. Nicholas Coal Breaker</td>
<td>1A</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

**Notes**
1. The estimated costs are not meant to be definitive, but rather to provide an idea of the level of financial resources that will be required to implement the action programs.
2. The estimated costs are to be shared among heritage partners.
• New water landings
• Regional parkland and gameland acreage

Community Revitalization
• Businesses created
• Total number of jobs
• Community-based revitalization initiatives

Heritage Tourism
• Total visitation
• Accommodations:
  – Hotel/motel tax collected
  – Length of stay
• Purchases:
  – Restaurant meals
  – Retail establishments
• Visitor gateways completed/under development
Figure 2-1
Alternative B: Places

Types of Heritage Resources
- Heritage Resource Community
- Heritage Resource Site
- Heritage Resource Area

- National Landmark
- National Park
- State Park
- State Forest
- State Gameland

- National Heritage Area
- Schuylkill Watershed
- State Game Land
- National Landmark

Cities and Boroughs
- Inside Heritage Area
- Outside Heritage Area

Map Compiled By:
Wallace Roberts & Todd, LLC
3.0 HERITAGE AREA ENVIRONMENT
3.0 HERITAGE AREA ENVIRONMENT

3.1 HISTORIC AND CULTURAL RESOURCES

History lies deep in the Schuylkill River Valley. Century after century, the history of human life in this region has accreted, one layer after another. As a result, there are few places within the Schuylkill River Valley National Heritage Area that fail to reveal multiple periods of occupancy and use. Virtually every acre is a cultural landscape that reveals the impacts and intentions of previous generations.

Seen from the perspectives of history, ethnography, archaeology, folklife, ecology, and landscape studies, the many landscapes, sites, and structures of the heritage area provide insights into what it has meant to be human in this place. The sheer number and variety of resources is enormous, as evidenced by the many registers of historic buildings, structures, and districts; lists of archaeological sites; directories of museums, libraries, historical organizations, and folklife resources; and bibliographies of local, county, and regional history available for the area. Table 3-1 provides one measure of this diversity: the total number of designated National Register properties and National Historic Landmarks in the five counties within which the heritage area is located.¹

Table 3-1. National Register Properties and National Historic Landmarks by County

<table>
<thead>
<tr>
<th>County</th>
<th>National Register Properties</th>
<th>National Historic Landmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berks</td>
<td>126</td>
<td>2</td>
</tr>
<tr>
<td>Chester</td>
<td>302</td>
<td>7</td>
</tr>
<tr>
<td>Montgomery</td>
<td>124</td>
<td>10</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>493</td>
<td>62</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,064</td>
<td>81</td>
</tr>
</tbody>
</table>

The overview presented in this section characterizes regionally significant historical and cultural sites, landscapes, and communities found in the Schuylkill River Valley National Heritage Area. Key resources are also illustrated on Figure 3-1. It should be noted that no one list of historical and cultural resources can do full justice to the heritage area. Whole resource categories have been passed over; factories, churches, cemeteries, and public buildings are only some of the many kinds of

¹The low number of properties in Schuylkill is due not to the absence of significant historic resources, but rather to relatively few actions that have been taken to formally nominate and designate such properties.
heritage resources that merit attention but cannot be addressed in this inventory. Instead, the resources identified below are intended to be illustrative and suggestive rather than comprehensive and definitive in nature.

It is important to note that the resources chosen for inclusion and reference are among the most telling, the most legible, and the most accessible within the larger universe of possibilities. Each resource inventoried presents opportunities for interpretation, programming, and linkage to the larger regional history. For the sake of convenience these resources are divided into a number of discrete categories, but these categories, like the realities of life and the layering of history, intersect and inform each other.

### 3.1.1 Environmental Context

The first step in revealing the layers of history in the Schuylkill River Valley National Heritage Area is to envision this region as an interrelated system of natural conditions and human activity. Ecology and environmental studies encourage us to conceive and visualize whole systems, including the role of people within those systems. Whereas Section 3.2 describes natural resources within the heritage area, this section addresses more specifically the interactions between humans and those resources, beginning with environmental education centers.

**A. Environmental Education Centers**

Environmental centers provide a variety of educational activities for students, groups, and individuals, typically including passive exhibits, hands-on exhibits, outdoor education, and participation in natural land restoration. Most centers also provide trails and manage and preserve land as well. The agenda of interpretation and learning in these centers focuses on the changing relationship of humankind and the natural world, society, and environment. In a riparian valley this relationship is critical and, therefore, a logical place to begin an inventory of historic and cultural resources. Environmental centers within the heritage area include:

- **The Schuylkill Center for Environmental Education:** This center is located in Northwestern Philadelphia, above the Schuylkill River. The site contains about 500 acres, including natural lands with about six miles of hiking trails and a center with a discovery room and library. The center also supports an extensive library and an organic community garden. Tours, workshops, lectures, and educational programs are offered to adults and children.
• **Riverbend Environmental Education Center:** This center is located on 31 acres of farm land, forest, pond, and stream in Gladwyne above the Schuylkill River. The center also manages additional acreage in Merion and Rosemont. Riverbend maintains a discovery room, classroom, and library.

• **Fairmount Park Environmental Education Center:** Fairmount Park maintains an environmental education center at the Andorra Natural Area along Wissahickon Creek.

• **Nolde Forest Environmental Education Center:** Nolde Forest is located on over 665 acres near Reading and is operated by the Pennsylvania Bureau of State Parks. The site contains native deciduous woods and conifer plantations. The Environmental Education Center provides a variety of activity-oriented programs for students, teachers, and other visitors.

• **Briar Bush Nature Center:** Located in Abington, this center offers educational programs for children and adults. Exhibits emphasize the ecology of the Mid-Atlantic region.

• **Fairmount Waterworks Interpretive Center:** This center is located in the historic Waterworks at the Fairmount Dam in Philadelphia. The site is part of Fairmount Park and is operated by the Philadelphia Water Department. Interpretation and education emphasize the importance of water and the watershed.

**B. Preserved Lands**

A significant amount of land in the heritage area is preserved in a predominantly natural condition. Key categories of resources include **natural land preserves** and **riparian corridors**.

**Natural Land Preserves**

Section 3.3 (Recreational Resources) identifies a number of parks within which natural lands are preserved. In addition, other private and municipal sites are maintained primarily for natural land preservation. Conservation easements on private lands are increasingly being used to protect natural areas. The type of facilities, the level of public access, and permitted activities varies with each area.

Much preserved land is in forested upland areas, because of the scenic values of these areas and the lower suitability of these areas for farming, leading to preservation or reforestation after agricultural abandonment. Major areas of preservation include:

• **Blue Mountain (Kittatinny Ridge):** Located in the Valley and Ridge Province, preserved lands include Weiser State Forest, Hawk Mountain Sanctuary, and state game lands.
The “Highlands” (including the Reading Prong): The Reading Prong is a belt of igneous rock south of Blue Mountain in the Reading area (see Section 3.2.1). Highlands sites are preserved near Reading (Mount Penn Preserve and Neversink Mountain Preserve); around French Creek (French Creek State Park, Hopewell Furnace National Historical Site, state game lands, Crow’s Nest preserve of the Natural Lands Trusts, and Warwick County Park); and in the diabase ring around the Upper Perkiomen valley. The latter area contains private preserves (e.g., the Fulshaw-Craig Preserve of the Natural Lands Trust); municipal preserves (e.g., White’s Mill Park); and conservation easements on private lands (e.g., easements on the Musser Scout Reservation in the Unami Creek Watershed implemented by several conservation groups).

Riparian Corridors

Corridors along major rivers and streams are the second main type of preserved area. These areas were originally preserved to protect against industrial development (e.g., stream valley parks in Philadelphia), to preserve historical sites (e.g., Valley Forge National Historical Park), or to provide recreational access to rivers and reservoirs (e.g., Lake Ontelaunee, Blue Marsh Lake, and Green Lane Reservoir). More recently, continuous or linked riparian corridors for trails and other recreational uses and for land preservation have been developed along several streams and rivers. These corridors include:

- **Schuylkill River:** Riparian sites are preserved in the vicinity of Reading (Riverdale and Heritage Parks and Reading Greenway); Pottstown (Riverfront Park); Phoenixville (Upper Schuylkill Valley County Park, Black Rock County Preserve, and Schuylkill Canal Park); Valley Forge National Historical Park; Conshohocken (Riverfront Park); and Philadelphia (Fairmount Park). Smaller parks and preserves are present in other communities along the river.

- **French Creek:** The French and Pickering Creeks Conservation Trust has approximately 3,500 acres under easement in the French Creek watershed. The organization is working on a trail along the French Creek from the eastern end of Warwick County Park to the Kennedy Covered Bridge at the border of East and West Vincent Townships.

- **Perkiomen Creek:** Preserves include the Lower Perkiomen Preserve Park in Oaks and the Audubon Wildlife Sanctuary in Audubon. Recent acquisition of land and easements to complete a trail along the Perkiomen Creek also preserves land along the river.

- **Skippack Creek:** A major section along Skippack Creek is preserved in Evansburg State Park.
• **Wissahickon Creek:** The lower Wissahickon Creek (in Philadelphia) is almost entirely preserved with the Fairmount Park system. Forbidden Drive along Wissahickon Creek is a heavily used recreational trail. Recently installed interpretive signs provide information about the cultural and natural history of the Wissahickon Valley, a good example of the potential for linking recreation and interpretation in the heritage area. Other sections of the watershed are preserved in municipal parks (e.g., Wissahickon Valley Park in Whitemarsh) and private preserves (e.g., Gwynned and Dodge Parks of the Natural Lands Trust). The Four Mills Nature Reserve in Ambler is owned by the Wissahickon Valley Watershed Association and is the center of the association’s educational activities.

• **Other Creeks:** Parks are present on many smaller creeks in the valley, although most of these do not preserve long, continuous stream reaches. Such sites are present along Swamp Creek, Pickering Creek (Pickering Creek Preserve in Phoenixville), Valley Creek (Valley Creek Park in Malvern), and Manatawny Creek (Memorial Park in Pottstown and Ironstone Recreation Area north of Pottstown).

A number of other preserves are owned by municipalities and private groups. These provide habitat for various plants and animals and provide recreational activities for local residents.

### 3.1.2 Historic and Cultural Context

Given the large scale of the Schuylkill River Valley National Heritage Area, for the purposes of this inventory historic and cultural resources are organized into “cultural landscapes.” According to an inventory completed in the early 1990s by the National Park Service (NPS) for the Schuylkill Heritage Corridor, cultural landscapes are:

> …the places where people live and work, where there is a visible relationship between the natural resources and the built environment which has been superimposed. They are the creation of hundreds of individuals acting over the centuries—and each individual action has added something to the patina of the landscape. The cultural landscape is all-inclusive: farms, forest, towns, and workplaces. It is what we have created on the land we found.2

The NPS inventory defined a great variety of cultural landscapes that can be found within the heritage area. The following text re-casts some of those types, merging some categories into others, re-naming them, and introducing at least one new category—the landscape of sprawl. In each category outlined below, a number of representative landscapes have been selected to make the larger ideas concrete. Other instances might be cited, but those chosen generally respond to a set of

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2 National Park Service Division of Park and Resource Planning, Mid-Atlantic Region, *Draft Inventory and Assessment of Cultural Landscapes*, July 1993
explicit criteria for sites and resources that are of regional or national significance.

A. Landscapes of Commemoration

Although many landscapes of commemoration routinely fall below our level of consciousness, like all peoples we have chosen myriad ways to recall exemplars and heroes, momentous events and influential movements of earlier generations. Street names and highway designations; building names and dedication plaques; squares, plazas, and public buildings; monuments and statues; cemeteries, historic houses, plantings, parades, and ceremonies all mark our lives and the places where we live.

These landscapes of commemoration invite us to consider the days of old and to reflect on how the past has become the present and how our present will very soon become the future. Because commemoration is so central to our lives, we invest heavily in commemorative landscapes, giving them diverse meanings that reflect our generations and particular points of view. A commemorative landscape like Valley Forge, which has been invested with meaning over several generations, has accrued multiple meanings over time, each responsive to a particular moment and perspective. At least two such landscapes in or near the heritage area have acquired national and international renown: Valley Forge National Historical Park and Independence National Historical Park (the Liberty Bell and Independence Hall). Germantown Avenue has been identified as a third landscape of commemoration.

• Valley Forge National Historical Park/Valley Forge Historical Society: This National Historic Landmark site commemorates Washington's encampment (December 1777-June 1778) after the Battle of Germantown and the failed attempt to force the British from Philadelphia. The Park's Visitor Center houses orientation and interpretive exhibits, collections of 18th-century military gear, and an archive. The Historical Society Museum tells the story of the encampment in the context of local and regional history. A new National Center of the American Revolution is planned for this site.

• Independence National Historical Park/Society Hill/Old City: Although these areas of old Philadelphia lie just outside the Schuylkill River watershed, they constitute the core of current heritage marketing efforts in the region focused on the Liberty Bell and Independence Hall. The new Independence Visitor Center on the re-designed Independence Mall provides information and access to many regional sites, including those in Montgomery and Chester Counties. Literally hundreds of 18th and 19th-century buildings survive in so-called “Historic Philadelphia,” as well as hundreds of more recent landmarks such as the PSFS Building.

- **Colonial Germantown Historic District/Germantown Avenue Corridor:** Upper Germantown Avenue in Philadelphia contains numerous 18th and 19th-century buildings, including several National Historical Landmarks. Taken together, these resources bear eloquent testimony to 300 years of American history and preserve memories of William Penn’s vision, the American Revolution, the early Republic, and the Civil War.

  Germantown Avenue sits on a ridge above Wissahickon Creek. The heart of Germantown Avenue represents an important instance of an early street village with houses built alongside the road and fields scattered beyond. Among the numerous historic buildings and sites in this landscape are Grumblethorpe, the Deshler-Morris House, Germantown Academy, Germantown Historical Society, Wyck, Mennonite Meeting House, Johnson House, the Concord School, Cliveden, and Upsala. Nearby sites include the Ebenezer Maxwell House, Germantown Cricket Club (a National Historic Landmark [NHL]), Loudon, Awbury Arboretum, Stenton, and Rittenhouse Town.

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**B. Landscapes of Cultivation: Agricultural and Rural Communities**

For more than 300 years, agriculture has been a mainstay of the region’s economy. In the 18th century Pennsylvania won renown as “the breadbasket of the colonies.” Cultivated fields, prosperous farmsteads, gristmills, smithies, crossroads, and market towns were the common landscape of this area. Agriculture is still practiced today, of course, and a good number of the old, established farms are still thriving (as indicated in lists of “Century Farms,” a misnomer as some have been actually been in existence for two centuries and more).

Less than 200 years ago, nine out of ten residents of the heritage area earned their living by farming. Today the ratio has more than reversed, and farming as a way of life is a matter of only passing interest to the vast majority of the resident population. The agrarian economy and society is among the “worlds we have lost,” yet this area has numerous survivals of earlier agricultural eras and rural towns. Examples include:

- **Orwigsburg, Schuylkill County:** In 1747 German immigrants arrived to settle the southern valley of Schuylkill County. Orwigsburg grew as
an agricultural village and in 1813 became the county seat, a role that passed to Pottsville in 1851. In the late 19th and early 20th centuries, a blacksmith shop, gun manufacturer, shoe factory, and knitting mill were established here. Today, the town’s main street supports shops and offices in old storefronts. Rolling hills with working farmsteads bounded by mountains surround the town. The nearby Little Schuylkill River is a reclamation success story, as it has been designated a Pennsylvania Scenic River along with the main branch of the Schuylkill River and annually draws large numbers of trout fishermen.

• **Oley Valley, Berks County:** The Oley Valley is a geographic enclave surrounded by hills in which is located the unusual Oley Township National Register Historic District. Pennsylvania Germans settled the valley in the 18th century, and today it boasts more than 160 historic farmsteads, many with extensive outbuildings, and several historic gristmills. Oley Village, a classic “street town,” expanded in the 19th century and about 150 19th-century residences, shops, and public buildings are now clustered along Main Street. Although a number of forges and small mills were established here, the agricultural landscape remains largely intact (80% farmland).

The **Daniel Boone Homestead** anchors the Oley Valley at its southern end. Operated by the Pennsylvania Historical and Museum Commission (PHMC), the 579-acre site includes the 1730-1779 Boone House and several outbuildings, the Bertolet Sawmill, rural furniture and decorative arts, agricultural implements, and blacksmithing tools. The Boone Homestead facilities include a visitor center, wildlife sanctuary, camping facilities, and trails. Programs include tours, living history, and environmental education.

• **Greater Kutztown Area, Berks County:** This area encompasses the historic communities of Kutztown Borough and Fleetwood and the Townships of Greenwich, Maxatawny, and Richmond. It contains a significant Mennonite population, may have the richest assemblage of Pennsylvania Dutch Hex signs in the world, and is home to the renowned Kutztown Folk Festival and the Pennsylvania German Research and Cultural Heritage Center at Kutztown University, which still teaches the rare Pennsylvania Dutch language. The heritage center consists of a 42-acre farm with several buildings showing the life of the Pennsylvania Germans in the 18th and 19th centuries.

• **Skippack Creek Valley, Montgomery County:** Skippack Creek Valley was settled primarily by German immigrants in the early 18th century, leapfrogging more settled areas. From 1710 to 1730 this area became the gateway for settlement of the Perkiomen region. Rural
industry in the form of fulling and carding mills, dye-houses, and gristmills were established along Skippack Creek, while farmsteads and street villages spread across the Valley. The economy peaked around 1850 and the landscape remained largely unchanged into the mid-20th century. Development of Evansburg State Park has constrained development in recent decades. Resources within the area include the street village of Skippack, the compact Welsh settlement of Evansburg, the Peter Wentz Farmstead, Jacob Reiuff Farmstead, and the Mennonite Museum in Harleysville.

• **Perkiomen Valley, Montgomery County:** Several important sites lie in the Perkiomen Valley, two of which merit special attention.

  **Pennypacker Mills** is a National Historic Landmark site located on 125 acres in rural Schwenksville. This turn-of-the-century gentleman’s country estate was the home of Pennsylvania Governor Samuel W. and Virginia Broomall Pennypacker from 1902 to 1916. Montgomery County maintains the estate as an historic house museum. The original 18th-century farmhouse, Washington’s headquarters during the Battle of Germantown, was transformed into a 20-room mansion filled with decorative arts from the 17th to the 20th centuries.

  Housed in a c. 1900 Red Men’s Hall in Green Lane, PA, **Goschenhoppen Folklife Library and Museum** specializes in Pennsylvania German folklife and regional history. Extensive collections of Pennsylvania German art and material culture, agricultural implements, costumes, and archives are interpreted to the public through tours, concerts, lectures, education programs, and the annual Goschenhoppen Folk Festival in August.

• **French Creek Valley, Chester County:** This valley is bounded to the north by Ridge Road, to the south by the south hills, and to the west and east by Elverson and Phoenixville, respectively. Coventry Forge, founded in 1717 during the European contact period, laid the foundation for the valley to become a center of the iron industry during the colonial period and early 19th century. Today, several industrial towns and villages (notably Phoenixville, Coventryville, and St. Peter’s) and crossroad villages and hamlets like Birchrunville, Kimberton, and Nantmeal preserve their historic character and integrity. Warwick County Park, encompassing about 500 acres, has an historical landscape that supports interpretation. Other properties within easy driving distance include Springton Manor Farm (Chester County Park), Hopewell Furnace National Historical Site and Valley Forge National Historical Park.

• **Middle Pickering Creek Valley, Chester County:** This valley was settled in the 18th century by Welsh Baptists and Presbyterians and
German Lutherans. The landscape is rolling with fields, pastures, and wet meadows enclosed by woodlands. Three small villages punctuate the landscape: Yellow Springs (Chester Springs Historic District), Anselma, Merlin, and Charlestown, all of which reflect their 19th-century character. Multi-generational ownership and perpetuation of traditional lifestyles tended to preserve the integrity of rural landscape and village clusters. The Valley is close to Valley Forge National Historical Park.

C. Landscapes of Extraction: Coal Patches and Mining Towns

The landscape of northern Schuylkill County has been shaped and reshaped by coal mining and processing. Coal patches, mine shafts, culm piles, and breakers punctuate the landscape, together with remnants of canal and railroad. The “landscape of extraction” as it has been termed is highly visible in northern and western Schuylkill County along Broad Mountain Ridge.

The 1993 NPS Inventory characterizes the towns of this region as follows:

All the towns have remarkable similar built landscapes: in each town, the railroad and river are at the deepest cut in the valley; the town extends on regular blocks up the steep hillside; the commercial street is the main axis, perpendicular to the river and railroad at the bottom; smaller houses gather lower on the hills; the larger houses of the manager class are above. Churches of several ethnic groups dot the townscape with distinctly different steeples. The graveyards of the traditional ethnic communities are found where the grid-blocks end, at the highest points in town.3

Patch towns, villages of small, nearly identical houses built along the roadways by mining companies, typically consisted of 30 to 40 houses and a company store adjacent to a colliery. Lacking churches or commercial buildings and with waste piles pushing up against the houses, these towns were isolated and vulnerable.

The advent of strip mining in this century radically altered the anthracite landscape, cutting into mountainsides and creating in their place new mountains of coal refuse. The 1993 Inventory remarks:

It is a landscape in use. All of the natural elements – coal, rivers, and the forests – have been exploited for the production and transport of coal.4

Significant resources include:

3 National Park Service Division of Park and Resource Planning, Mid-Atlantic Region, Draft Inventory and Assessment of Cultural Landscapes, July 1993
4 ibid
• **Museum of Anthracite Mining/Pioneer Tunnel Coal Mine, Ashland:**

The work of mining and processing anthracite coal is interpreted in a complex at Ashland. Operated by the PHMC, the Museum of Anthracite Mining tells the story of owners, workers, and changing technologies. The Pioneer Tunnel Coal Mine, a horizontal drift mine operated for 20 years (1911-31), can be toured with retired miners as docents. A steam train ride at the site offers visitors an overview of contemporary strip mining.

• **Shenandoah and Shenandoah Heights, Schuylkill County:** In the 1860s the arrival of the railroad precipitated the growth of Shenandoah as a mining town. Between 1880 and 1915 an influx of Slavic immigrants filled the mines, though Irish, Italians, and Germans were also resident in numbers. Workers lived below in Shenandoah, managers on the Ridge above. As mining declined a number of mills and factories were established; these, too, are now defunct. The town's houses, commercial buildings, abandoned factories, and ethnic churches retain their historical integrity. A strip mine landscape surrounds the town and the Mahanoy Valley below. The largest coal breaker in the world (now abandoned) is located one mile from Shenandoah in Saint Nicholas alongside Route 54. Half a mile beyond lie the remnants of Wiggins Patch, several frame houses and an old school house.

• **Mahanoy Valley Patch Towns, Schuylkill County:** Along Route 54 between Ashland and Shenandoah the landscape is in motion. Mountains of mine refuse rise and fall, as this contaminant laden waste product of over a century of mining is now being reclaimed and prepared as fuel for several nearby cogeneration plants. Electricity generated from these facilities is sold on the power grid, making Schuylkill County a net exporter of “green energy.” The roadway is dotted with patch towns: Big Mine Run, Lost Creek, West William Penn, and East William Penn. Similar landscapes can be seen along Old Route 209 between Pottsville and Tamaqua, where visitors encounter New Philadelphia, Cumbola, Brockton, Mary D, Tuscarora, Reevesdale, and Newkirk.

• **Frackville and Gilberton, Schuylkill County:** The vast scale of the Anthracite industry was exemplified by the Mahanoy Plane, a power-driven hauling system that brought loaded coal cars from Mahanoy City and Gilberton at the foot of the Plane up to Frackville at the top, a change in elevation of approximately 800 feet. The Mahanoy Plane was used to haul more than a billion tons of coal over 70 years of service beginning in 1862, making the Mahanoy Valley accessible to the markets along the lower Schuylkill. Frackville retains its distinctive churches, but the Mahanoy Plane was dismantled in
1952, leaving little trace. The contemporary cogeneration plant at Gilberton, on the other hand, evokes for observers the vast scale of mining in this region.

- **Pottsville, Schuylkill County**: Pottsville became the seat of Schuylkill County in 1851. It has long been the financial and commercial center of the anthracite region, sited at the center of the region’s highway network. The County Courthouse was the scene of the Molly Maguire trials and remains a prominent feature of the urban scene. Pottsville is also the locus of the Yuengling Brewery, a popular regional attraction. Jerry’s Classic Car Museum is another Pottsville attraction. Based in Pottsville, the Historical Society of Schuylkill County has important collections of local and county history and has moved into a new building, which may make it a more active attraction. Pottsville is a short distance from the towns of Minersville and Saint Clair, the site of John’s Patch.

- **Tamaqua, Schuylkill County**: Like Pottsville, Tamaqua was a commercial center for its hinterland as well as a gateway to the Lehigh Valley. While much of the old downtown area has been compromised, the historical residential neighborhoods and several factories remain intact. The borough’s historic character was recognized through designation of a National Register District in 2001 encompassing nearly 1,000 properties. The old Tamaqua Train Station is being restored and will include a Heritage Corridor Visitors Center. The Tamaqua Historical Society maintains a small, eclectic, and fascinating museum in a former bank building.

D. **Landscapes of Industry: Canal and Manufacturing Towns**

Many riverside towns in the heritage area were sited near sources of water power. The nucleus of these communities was often a mill, a furnace, or a forge. Beginning in the 1820s, the Schuylkill Navigation made water transportation available to places which had not previously had access. After 1839, many places along the River Valley were linked by railroad to raw materials (including anthracite coal) and to local and regional markets.

The economies of the canal and manufacturing towns in the heritage corridor were typically diversified but focused on the needs of an older still-rural economy. Agricultural machinery, carriages and wagons, harnesses and textiles were common products, but by the 1920s the Schuylkill Canal was closed and manufacturers were shifting steadily away from smaller towns to cities like Philadelphia. Stagnant or declining economies and isolation from the emerging automobile-trucking-highway network spared the historical fabric of many towns from the impacts of modernization and renewal.
Many of the riverside towns share a common landscape or urban pattern. The Schuylkill Canal was close to the river bank. Railroad tracks were located close to the Canal. Large mills and other industrial buildings lined the railroad; these industrial districts often cut the town off from the River. Commercial streets ran parallel and perpendicular to the industrial district with clusters of public buildings, churches, and halls. The residential neighborhoods spread out beyond the commercial area, with clear segregation of workers, managers, and owners.

Significant canal and manufacturing towns include:

• **Schuylkill Haven, Schuylkill County:** Schuylkill Haven was founded in the mid-18th century at a ford just south of the confluence of the Schuylkill River with the West Branch. The town began as an agricultural village with saw and grist mills. In 1825 the Canal opened along the Schuylkill Haven portion of the River and in 1831 the first of four railroads reached the town. Schuylkill Haven served as a transportation center for decades, though little evidence of the canal and railroad remain in place. In the 1890s textile manufacture began, and two large mills remain intact in the center of town. The center of town retains a late 19th-century character and mills continue to be a feature of the streetscape.

• **Hamburg, Berks County:** Hamburg was laid out in 1772 by a German miller and landowner. Although located at the only gap in the Blue Mountain and a crossroads for two early roadways, Hamburg grew slowly as a market hamlet. The canal arrived in 1824, followed by railroads in 1842 and 1885. Hamburg burgeoned as a manufacturing center with mills, factories, foundries and machine shops, breweries, and a distillery. The old commercial center remains largely intact with many original storefronts and facades.

• **Wyomissing, Berks County:** Wyomissing, sited on Wyomissing Creek, was settled by Welsh immigrants before 1740. By the mid-19th century a number of water-powered mills had been established, but these gradually ceased operation as competition from steam-powered mills made them uneconomical. At the very end of the 19th century, the Reading Suburban Real Estate Company acquired farmland in Wyomissing and began building speculative housing. The developers also encouraged the Textile Machine Works to re-locate to the area. Business expanded and consolidated as the Wyomissing Industries, occupying 60 acres along the main commercial street. The owners of the company, Henry Janssen and Ferdinand Thun, created a major “garden suburb” with a variety of architectural styles, a linear park along Wyomissing Creek, a cooperative store, a savings and loan association, and community gardens. In 1926 Wyomissing was the first borough in Pennsylvania to adopt zoning. Virtually all of the
major elements in this planned community remain intact and legible.

- **Reading, Berks County:** Reading was originally established as a county seat and market town by the Penn family in 1748. The new town was located on a ford and laid out in a grid pattern. In the 1840s Reading began its spectacular growth as a center of industry. The largest and most prominent enterprise was the Reading Railroad, at one time the largest corporation in America, whose yards and shops punctuated the city landscape.

Other industry also came to town in the second half of the 19th century: forging, tools, and hardware; hats, cigars, and breweries; textile and hosiery. Population swelled and whole new residential districts sprang up. The 1993 NPS inventory called out three historic districts as especially noteworthy: the Callowhill Historic District, including the original commercial and public center; Prince Historic District, a largely Victorian area of development; and the Centre Park Historic District, a neighborhood of early 20th-century housing for the middle-class and the wealthy. Other important Reading resources include the Historical Society of Berks County and the Reading Public Museum and Art Gallery.

Located near Reading, the **Berks County Heritage Center** is an outstanding complex that includes a museum dedicated to the history of canals (sited near a branch of the Union Canal), a restored covered bridge, and the Gruber Wagon Works, a National Historic Landmark. Gruber Wagon Works produced wagons and other vehicles for a hundred years beginning in mid-19th century. The **Mid-Atlantic Air Museum**, which contains a significant collection of vintage aircraft and a yearly World War II airshow, is located near the Heritage Center.

- **Pottstown, Montgomery County:** Pottstown was founded in 1752 by ironmaster John Potts at the confluence of Manatawny Creek and the Schuylkill River. Like Reading, Pottstown was a planned town, laid out on a grid. Pottstown developed as a market and service town for its agricultural hinterland. The arrival of the Schuylkill Canal in 1821 and the Philadelphia and Reading Railroad in 1836 led to the industrialization of the local economy. Pottstown produced textiles, steel, food products, and building materials. As industry declined in the second half of the 20th century, much of the industrial fabric was lost, though individual industrial buildings remain. The old commercial district along High and King Streets retains much of its early 20th-century character.

**Pottsgrove Manor** in Pottstown is operated by Montgomery County as an historic house museum specializing in the early history of the local iron industry, 18th-century Quakers, and African American history in the Colonial period. The site includes a Colonial Revival
garden and offers guided tours, educational programs for children, and special events. This important site has been cut off by modern roadways from both the Schuylkill River and the historic city center.

- **Phoenixville, Chester County:** Settlement of Phoenixville began with the establishment of a grist mill in 1732. A hamlet grew to serve the surrounding agricultural community and a succession of small iron works were operated here. The Civil War spurred the growth of the Phoenix Iron Works, which later became one of the largest iron and steel producers in southeastern Pennsylvania. The company was well-known for the “Phoenix Column,” widely used in buildings and bridges. The company closed in 1974.

  Most of the older parts of the Phoenix Works have been demolished, but the 1875 foundry building remains intact and is being restored to house a Heritage Corridor Visitors Center. Several blocks of early workers’ housing remain intact. Directly across the River from Phoenixville is Oakes Reach in Montgomery County, one of only two remaining watered segments of the Schuylkill Canal.

- **Norristown, Montgomery County:** Norristown was settled in the early 18th century and became the county seat in 1784. The town grew from the central core of the courthouse, jail, churches, and other public buildings. Industrial growth began early in the 19th century, intensified during the Civil War, and expanded into the 20th century. Much of this industry grew up along the River, south of the institutional core.

  The industrial district survives relatively intact, with some losses. The institutional core, the commercial district, and residential neighborhoods occupied by the working class (many of them immigrants) and by the wealthy are also intact.

- **Manayunk, Philadelphia:** The opening of the Flat Rock Canal in 1819 along the east bank of the Schuylkill provided abundant opportunity to establish water-powered mills. By 1830 more than 20 mills were operating here. Today Manayunk remains a classic example of a 19th-century mill town with a ribbon pattern of development. Elements of the Schuylkill Navigation remain in place (though the Canal was closed to active traffic in 1916), as do several prominent ethnic churches. The historical housing pattern also survives: modest row houses for workers nearest the mills and larger single dwellings for managers uphill toward Roxborough. Contemporary Main Street Manayunk is a thriving, up-scale shopping and dining center for the City and region. Adjacent neighborhoods of interest include Roxborough and East Falls.

  Three very early industrial sites are also of special interest:
• **Rittenhouse Town Historic District, Philadelphia**: Previously discussed in the context of Germantown, Rittenhouse Town is an enclave of historic structures on the banks of Wissahickon Creek in Fairmount Park. It preserves a colonial paper-making complex owned and operated by the prominent Rittenhouse family. The site sponsors educational programs and is planning for expanded interpretation.

• **Hopewell Furnace National Historical Site, Chester/Berks Counties**: Hopewell Furnace National Historical Site preserves an important complex of dwellings and early industrial structures associated with the charcoal iron industry. Hopewell Furnace supplied essential artillery to the Continental Army and also produced iron stoves and other domestic products. Extensive archaeology has been conducted here to guide historical interpretation.

• **The Mill at Anselma, Chester County**: Located in the Pickering Creek Valley in West Pikeland Township, the Anselma Mill was built in 1747 and is considered by many to be one of the finest examples of early American industrial technology still remaining. The 22-acre property was purchased by the French & Pickering Creeks Conservation Trust and conveyed to the newly-formed Mill at Anselma Preservation and Educational Trust. The Trust plans to preserve and restore the mill, its equipment, and other buildings on the site, while interpreting the everyday life of the village of Anselma.

In addition to the above resources, the industrial landscape has left its mark in prominent structures throughout the region, notably in its **bridges and tunnels**. Notable survivals include the Girard Avenue Bridge in Philadelphia, once the widest bridge in the world, the great railroad bridge at East Falls near the mouth of Wissahickon Creek, and Peacock Bridge in Berks County. Railroad tunnels, both abandoned and in use, are also significant markers of the industrial landscape, while covered bridges in places such as Wissahickon Creek, Valley Forge, and the Berks County Heritage Center harken back to an earlier period of industry.

**E. Landscapes of Romance: Parks, Arboreta, Zoos, and Gardens**

In 1889 Lafcadio Hearn exclaimed that Fairmount Park was “the most beautiful place of the whole civilized world.” By then, the idea of scenic landscapes, filled with moral and recreational value and imbued with the power of renewal, had taken hold in the region. Parks, arboreta, gardens, and zoos were created in many locales throughout the region. Indigenous and exotic elements were mixed together in sometimes fanciful fashion to capture the romance of nature. Of these efforts, Fairmount Park was—and is—the most compelling landscape of romance. Numerous arboreta, gardens, and zoos fall into this category as well.
Fairmount Park

Fairmount Park traces its origins back to 1822 when acreage adjacent to the Waterworks was landscaped to form the earliest planned municipal park in the U.S. In 1844 the City purchased Lemon Hill to protect its water supply. Additional purchases followed, and by 1867 the Pennsylvania General Assembly set aside a large area bordering the Schuylkill River “forever as an open public space.” Today this great urban park is a National Historic Landmark encompassing more than 4,000 acres of open land with numerous recreational and cultural sites. It includes virgin soil strata, rock outcroppings, and ancient trees, as well as tennis courts, playing fields, swimming pools, picnic areas, and two outdoor music centers. Within the Park lie many important historic/cultural complexes and sites, including Rittenhouse Town, Laurel Hill Cemetery, Boat House Row, the Fairmount Park Houses, Fairmount Waterworks, and the Centennial Exposition Complex. Other notable features include sculpture gardens, the Japanese Tea House, and numerous commemorative statues. Among the more significant resources are:

• **Laurel Hill Cemetery**: Laurel Hill Cemetery (NHL) is one of America’s earliest and most outstanding 19th-century rural cemeteries. Designed by architect John Notman in 1836, the site is “a romantically landscaped arboretum and sculpture garden highlighted by a handsome Doric gatehouse.”

• **Fairmount Park Houses**: More than 20 historic country homes are located within Fairmount Park, plus three other historic houses that have been moved to sites within the Park. Several of these are operated as historic house museums. Notable structures include Belmont Mansion (1755), Mount Pleasant (1761, NHL), Lemon Hill (1799), Strawberry Mansion (1797, 1825, 1870), Cedar Grove (1748, 1752), Sweetbriar (1797), Ormiston (1798), and Woodford (1756, 1772).

• **Boat House Row**: On the Kelly (East River) Drive of Fairmount Park lies an assemblage of ten river-boat clubhouses (NHL) dating from the late 19th and early 20th centuries. Boat clubs were first organized in the 1850s and the Schuylkill Navy was formed in 1858 to supervise regattas. Boat House Row was dramatically lighted in the 1970s and is now a prominent landmark along East and West River Drives, the Schuylkill Expressway, and Amtrak’s Northeast Corridor.

• **Fairmount Waterworks**: This group of buildings (NHL) housed the pumping system for Philadelphia. It was notable both as a 19th-century engineering marvel and as an architectural complex, styled like a Greek temple complex. The site served as the city aquarium, 1911-62. It is now an interpretive center that focuses on the ecology of the Schuylkill River watershed.
• **Centennial Exposition Complex:** The Centennial Exposition of 1876 was America’s first great world’s fair. Two exposition buildings survive, Memorial Hall and the Ohio House. The great Civil War Memorial (Smith Memorial Arch) was built in 1897-1912 under the auspices of the Fairmount Park Art Association.

Close by Fairmount Park is the **Woodlands,** an Adamesque-Federal country house built c. 1742 that had the first giant portico on a Philadelphia building. Woodlands was enlarged and remodeled by William Hamilton in 1787-90 and was the country seat of the prominent Hamilton family. Noted for its exceptional gardens, the property became the site of a prominent rural cemetery in 1843. The mansion house survives and is used as administrative offices.

**Arboreta, Gardens, and Zoos**

Arboreta, gardens, and zoos are another regional manifestation of the romantic impulse. These resources provide cultivation and maintenance of native and exotic plants, public education, recreation, and research. Zoos provide public exhibition of plants and animals, and support research and conservation of animals. The Philadelphia region is nationally renowned for its concentration of public arboreta and gardens. Major sites in the Schuylkill River Valley National Heritage Area include:

• **Historic Bartram’s Gardens:** John Bartram, America’s first internationally known botanist built this house (1730-31; NHL) and lived here 1731-77, succeeded by his son. The 45-acre site has several gardens, historic trees, and natural meadows and wetlands. Specimen trees and plants, 18th-century garden layout, and the historic house provide a platform for historical and environmental interpretation.

• **Morris Arboretum of the University of Pennsylvania:** Morris Arboretum is located on 166 acres in Philadelphia along Wissahickon Creek. It maintains public gardens, including a fernery, a formal rose garden, and Victorian landscape plantings with 6,800 labeled, temperate woody plants. The Arboretum preserves natural lands along the creek and conducts botanical and horticultural research, outreach on urban forestry, public education, and natural land restoration. Research interests include Pennsylvania flora and the adaptability of trees to urban sites. The Arboretum maintains an extensive library and an education center. As the Commonwealth’s official arboretum, the Morris Arboretum houses the state tree collection.

• **Mill Grove (the Audubon Wildlife Sanctuary):** A National Historic Landmark, Mill Grove was the first American home of noted naturalist and artist John James Audubon. Operated by Montgomery County, the site includes the 18th-century house, displays of
Audubon’s artwork, nature trails, and a variety of educational programs.

- **Awbury Arboretum (Francis Cope House):** Awbury Arboretum in Germantown occupies 55 acres of landscaped parkland with specimen trees. The Arboretum specializes in nature education, horticulture, and local history with guided tours and educational programs for children and adults.

- **College and University Gardens:** Several campuses in and near the heritage area support gardens and arboreta. The grounds of the Temple University Campus at Ambler have been designated as an arboretum, and the campus includes formal gardens, a variety of other gardens, nurseries, and field and woodlands around the campus. The university has major programs in landscape architecture and horticulture. The American College campus in Bryn Mawr contains 35 acres with specimen trees, gardens and a pond. The grounds of Bryn Mawr College were designed by Calvert Vaux and Frederick Law Olmstead and contain specimen trees and gardens. The Villanova Arboretum at Villanova University supports a variety of trees and gardens. The University of Pennsylvania maintains gardens and a pond at its campus in west Philadelphia. The Haverford College Arboretum includes a Pinetum and Japanese garden. Tours, classes, lectures, and films are offered to the public by the Campus Arboretum Association.

- **Other Public Arboreta and Gardens:** Other public arboreta and gardens in and near the heritage area include the Henry Foundation for Botanical Research, Jenkins Arboretum, and the Barnes Foundation. The Henry Foundation is located on 50 acres in Gladwyne (Montgomery County) and focuses on native flora. The site contains public gardens and is used by classes, civic groups, and tours. Jenkins Arboretum in Devon (Chester County) contains plantings among natural woods. The arboretum specializes in rhododendrons and azaleas. The Barnes Foundation in Merion maintains one of the world’s foremost collections of French impressionist and post-impressionist art surrounded by twelve acres of rare and specimen plants. The Arboretum School offers courses on horticulture, botany, and landscape architecture.

- **Other Historic House Gardens:** Several of the historic houses in the Schuykill River Valley support gardens. The Highlands Mansion and Gardens in Fort Washington is an example. Wyck Gardens, at the Wyck estate in Germantown, Philadelphia, feature 18th-century gardens, including rose, herb, vegetable gardens, and a woodlot. Gardens are also maintained at Hope Lodge in Fort Washington and the Ebenezer Maxwell Mansion in Philadelphia. The grounds
of the Conrad Weiser House in Berks County were designed by the Olmstead Brothers. The Pinetum and Hillside Garden at historic Welkinweir in Chester County, now the headquarters of the Green Valleys Association, is another example.

- **Fairmount Park**: Fairmount Park in Philadelphia maintains several horticultural sites. The Japanese Gardens, within West Park, contain a 17th Century style house, a pond and gardens. Horticulture Hall, also in West Park, includes a conservatory, formal outdoor gardens, and naturalistic plantings.

- **Philadelphia Zoological Society**: The Philadelphia Zoological Society is the oldest zoo in the country. It maintains indoor and outdoor collections, supporting about 1,800 species of animals, including species indigenous to this region. The Zoo also contains specimen plantings and historic buildings including Solitude (1785) and the Furness Gates.

- **Elmwood Park Zoo**: Located in the Borough of Norristown’s Elmwood Park, the 16-acre Elmwood Park Zoo contains a variety of North American animals, as well as a petting barn.

**F. Landscapes of Consumption: Suburbia and Exurbia**

The 1993 NPS Inventory categorized the post-war period as an age of “sprawl.” The new Interstate Highway System intensified several key trends: movement from the aging city cores to rapidly growing suburban and exurban developments; isolation of residential, commercial, and industrial districts from each other; and shifts from 19th-century manufacturing to emergent technologies sited in highway-oriented industrial parks.

The 1993 Inventory characterized these movements as follows:

> The draining of commerce, manufacturing and population from the cities, and the filling of the city edges and countryside with these attributes can be compared with a mudslide that erodes a great mountain and fills the fertile agricultural plain below it.⁶

This view is tempered by recognition that we are participants in the ongoing post-war changes. Our vision of what is happening is obscured to some degree because of our proximity to the movements and trends of this era—and our stakes in their outcomes. But perhaps another way to characterize this period of transformation is to conceptualize it in terms of the consumption that results from the affluence of contemporary society. From this perspective, the spread of population across tracts of

⁵ National Park Service Division of Park and Resource Planning, Mid-Atlantic Region, Draft Inventory and Assessment of Cultural Landscapes, July 1993

⁶ ibid
formerly rural and agricultural lands can be construed as a pattern of consumption.

The new landscape of consumption has its landmarks: the limited access highway; the suburban development; the strip mall and the shopping center; the chains of franchised stores and restaurants; the industrial park and the office park; the video arcade and the internet café. The heritage area can boast numerous instances of these and related sites, although little has been done to date to mark and interpret these relatively recent landmarks. Nevertheless, it is worth noting several of the most important of these sites within the region:

• **Valley Forge Interchange:** The juncture of the Schuylkill Expressway (itself a significant post-war landmark) and the Pennsylvania Turnpike constitutes one of the area’s largest, most complex, and most-trafficked interchanges. An entire “edge city,” as documented in the well-known book by Joel Garreau⁷, has developed at and around this interchange.

• **King of Prussia Mall:** Typical of the contemporary American landscape, shopping malls are common along arterial highways in portions of the heritage area outside of traditional urban centers.

The King of Prussia Mall, with its large concentration of up-scale stores, sophisticated architecture, and intense marketing, is of special note due to its size and its status as a major regional visitor attraction.

• **Reading Outlets:** The outlet store as mass consumption is a post-war phenomenon. The Reading Outlets, though declining in the number of visitors in recent years, still outdraw Valley Forge and Independence Hall and the Liberty Bell combined.

G. **Other Historical and Cultural Resources**

The Schuylkill River Valley National Heritage Area contains so many historic resources, sites, and opportunities that no inventory can possibly do them full justice. However, a number of important sites and institutions that do not fit under one or another of the above categories deserve mention, including:

• **Historic Fort Mifflin:** This notable fort is a National Historic Landmark located at the confluence of the Schuylkill and Delaware Rivers. Its stone and brick walls are surrounded by a moat. The original fort was the site of the Battle of Mud Island during the American Revolution. Portions of the original wall built in 1772-1798 are still standing, but the fort represents primarily a 19th-century plan and construction. Notable structures include the Barracks, Commissary, Arsenal, Magazines, Artillery Shed, and

---

Smith’s Shop. The environs constitute an important nature preserve.

- **Philadelphia Museum of Art**: Sited atop Fairmount at the northwest end of the Benjamin Franklin Parkway, the Museum is an outstanding example of early-20th-century eclectic Neoclassical design. Collections include outstanding examples of regional art, furniture, furnishings, and decorative arts from the 17th century to the present.

- **University of Pennsylvania**: Originally founded by Benjamin Franklin, the University moved to its West Philadelphia site in 1871. The University complex contains numerous outstanding buildings, including College Hall (Thomas Richards, 1871), Furness Library (Frank Furness, 1888), the University Museum (Wilson Eyre, et alia, 1890s), Men’s Dormitories (Cope and Stewardson, 1895), Hill House (Eero Saarinen, 1958-60), Parking Garage (Mitchel/Giurgola Associates, 1963), and Richards Medical Research Building (Louis Kahn, 1957-61).

- **Academy of Natural Sciences**: The Academy, one of America’s most important natural history museums, is located on Logan Circle in Philadelphia. Many of its collections and exhibitions pertain to the region, and the Academy has taken special interest in promoting environmental education within the Schuylkill River Valley.

- **Conrad Weiser House**: A designated National Historic landmark, this stone farmhouse was built in 1729 by Johann Conrad Weiser. Weiser was an early settler who promoted friendly relations between the Iroquois and the British, a decisive factor in Britain’s victory in the French and Indian War. Located in Berks County, the site is operated by the PHMC.

- **American Swedish Historical Museum**: This museum, located in South Philadelphia on a part of the 17th-century Queen Christina land grant, houses an extensive library and material culture collection relating to the history of Swedish immigration and settlement in the United States, with special reference to this region.

- **League Island (United States Navy Yard)**: In 1876, the U.S. Navy Yard was moved to League Island at the confluence of the Schuylkill and Delaware Rivers, where it eventually became the Navy's largest shipbuilding center and a pioneering site for naval aviation. The Navy Yard was closed, but remains the berth of a large number of decommissioned ships. The shipbuilding and industrial complex are now home to a variety of private industries.

- **United States Naval Asylum**: A National Historic Landmark, this former home for retired naval personnel at Gray’s Ferry Avenue and 24th Street was the site of the original U.S. Naval Academy.
The complex includes four historic buildings on nine acres. The main building, Biddle Hall, is a Greek Revival structure designed by William Strickland in 1827-33 and incorporates one of the first uses of cast-iron construction. The site was abandoned by the Navy in 1976 and is now in private hands.

- **Drexel Institute of Art, Science, and Industry (Drexel University):** The main building of Drexel Institute opened at 32nd and Chestnut Streets in Philadelphia in 1892. It is an outstanding example of academic architecture with ornate terra-cotta detailing. The building houses the Drexel University Art Museum.

- **Wharton Esherick Museum:** Located in Paoli, Chester County, the Wharton Esherick Museum is recognized as one of the most unique buildings in the United States and was declared a National Historic Landmark in 1993. A painter and woodworker, Esherick created a studio and shop along the crest of Valley Forge Mountain and spoke of the structure as an autobiography in wood. The interior is a unified environment of wooden architectural forms, structural elements and furnishings executed in the spirit of sculpture.

- **Boyertown Museum of Historic Vehicles:** The Boyertown Museum collection features important horse-drawn and mechanized vehicles with local and regional associations, including wagons, carriages, automobiles, and trucks. Art, models and tools used by builders, exhibits, and public and educational programs interpret this subject.

- **Historical Society of Berks County:** The Society focuses on County history with an extensive library and archives. Special strengths of the collections include agricultural implements, decorative arts, Indian artifacts, and Pennsylvania German material culture. The Society offers exhibitions, lectures, concerts, and educational programs.

- **Reading Public Museum and Art Gallery:** This general-purpose museum maintains notable collections of Pennsylvania folk art, Native American artifacts, decorative and fine arts, mineralogy, and natural history. The Museum offers exhibitions, tours, lectures, concerts, and educational programs.

- **Community Cultural Center for Schuylkill County:** Housed in the former Yuengling Mansion in Pottstown, a National Register-listed property, this center houses a professional and volunteer staff dedicated to fostering growth in the art and ethnic heritage of Schuylkill County. The Center sponsors a variety of arts and cultural activities, such as an Artist-in-Residence series and exhibits, arts and crafts classes, and uniquely themed special events and entertainment.
3.1.3 Archaeological Resources

In addition to historic resources, the Schuylkill River Valley National Heritage Area is rich in pre-historic and historical archaeology. Native American communities flourished along the river we call the Schuylkill for over 12,000 years, with European settlers a relatively recent influence on the landscape. Each generation has left its mark on the land, from scattered stone tools and flakes to the massive structures of the 20th century. Written records exist only for the last 350 years. All knowledge of earlier peoples is based on physical clues such as stone tools, pottery fragments, and earth discolored by the remains of fireplaces, storage pits, and houses. Even for the documented past, buried evidence may tell us more than the written record. The architecture of a house or barn, the landscape of a garden, the power system of a mill, or the living standard of a mill hand may be preserved better beneath the sod than in a document, and almost always the combination of archaeology and history is more powerful than either by itself.

PHMC staff have catalogued 1,130 archaeological sites, most predating European settlement, along the Schuylkill River. Even these extensive surveys are not exhaustive. To the known count of prehistoric sites must be added the buried remains of farms and industries, towns and suburbs. Everywhere people live, they leave traces in the ground – at least until others erase the archaeological evidence by re-arranging the surface of the earth.

The goal of preserving the Commonwealth’s archaeological, historic, and natural resources is incorporated in Pennsylvania’s constitution (Article I, section 27), History Code (Statutes Title 37), and Municipalities Planning Code. Any public or private development requiring a federal or state permit or benefiting from federal or state funds must be reviewed by the PHMC staff to ensure that it does not damage archaeological resources on or eligible for the National Register of Historic Places. Extensive information on Pennsylvania’s historic preservation goals, rules, and regulations is available at the PHMC website (www.phmc.pa.us).

3.1.4 Folklife

Dr. Kenneth Thigpen, in his 1993 report on folklife prepared for the Schuylkill Heritage Corridor, notes that:

Folklife is the representation of special activities in the lives of ordinary people, as well as the customary activities of all people, regardless of class or background. 

Kenneth A. Thigpen, Folklife and Ethnic Resources Inventory, July 1993

Susan L.F. Isaacs, Cultural Conservation for the Schuylkill River Heritage Park, January 1993
Dr. Susan Isaacs asserts in her 1993 report on the same subject that:

*The field of folklore and folklife has long been concerned with relationships between people and their surroundings—the natural and built environments in which they live, work and play.*

In effect, folklife is the “landscape of living.”

Folklife takes many forms: material culture including decorative arts; expressive culture including play, dance, and ritual; and intangible cultural forms such as custom and belief. Conservation of folklife and ethnic traditions typically focuses on three (of many) important dimensions: the tradition bearers, the process of culture-making, and the products, tangible and intangible. The two 1993 studies identified hundreds of significant folklife expressions in the heritage area, many inventoried in the Pennsylvania Heritage Affairs Commission (PHAC) Traditional Arts Survey, the PHAC Database of Pennsylvania Ethnic Organizations, and other listings. Key resources for the documentation and encouragement of regional folklife resources are:

- **Institute for Cultural Partnerships, Harrisburg**: This not-for-profit organization is headed by Dr. Shalom Staub, former head of the Pennsylvania Folklife Office. The Institute works with schools and communities on programs that celebrate ethnic traditions and minority cultures.

- **Historical Society of Pennsylvania/Balch Institute for Ethnic Studies, Philadelphia**: The recent amalgamation of the Balch Institute and the Historical Society of Pennsylvania (HSP) brought to HSP extensive collections of books, archives, photographs, and objects that illustrate ethnic heritage in this area.

- **Folklife Center, International House of Philadelphia**: International House has offered multi-cultural programs for more than 80 years. The Folklife Center presents international music programs, workshops, an annual craft fair, and school programs.

- **Philadelphia Folklife Project**: This research organization has documented numerous ethnic cultures and folk traditions in Philadelphia and beyond. Staff and archives are both key resources for regional folklife.

### 3.2 NATURAL RESOURCES

#### 3.2.1 Physiography and Soils

Geology, topography, and soils vary throughout the Schuylkill River Valley National Heritage Area, generally corresponding to the four major physiographic provinces in the region: the Ridge and Valley, Piedmont, New England, and Atlantic Coastal Plain (Figure 3-2). Overall elevation
in the heritage area ranges from near sea level in downtown Philadelphia to over 1600 feet in the mountains of Schuylkill County.

The Ridge and Valley Province encompasses the largest portion of the heritage area. It includes most of Berks and Schuylkill Counties and has two distinct sections. The Schuylkill River has its origin in the Appalachian Mountain Section, which is characterized by long and narrow mountain ridges separated by valleys of varying width. The elevations of the mountains can be several hundred to almost a thousand feet higher than in the neighboring valleys. Soils in the Appalachian Mountain Section consist of well to moderately well drained silty loams derived from siltstones and shales. Bands of limestone and dolomite can be found in the valleys and erode to form more fertile soils. The ridges are often composed of highly resistant sandstones and have shallow soil depths.

The Great Valley Section of the Ridge and Valley Province includes most of Berks County. It is characterized by gentle rolling hills in the northern part and a flatter, low-lying landscape in the south. The northern part of the Great Valley is underlain by shales and siltstones, while the southern is underlain by limestone and dolomite. The combination of a flat landscape, proximity to large waterbodies, and limestone and dolomite bedrock makes the southern portion of the Great Valley especially fertile. Soils in the Great Valley are generally well drained silty loams.

The New England Province makes a couple of intrusions in the heritage area. The Reading Prong Section of the New England Province is composed of the hills to the east of Reading. A small section is also located to the west of Reading. The Reading Prong is characterized by resistant bedrock that forms steep hills and ridges. The bedrock in this area is most often granitic gneiss, quartzite, and granodiorite. Soils in the Reading Prong Section are often well drained and fine grained silty loams.

The Piedmont Province encompasses the southwestern part of Berks County, the northwestern part of Philadelphia County, and all of Montgomery and Chester Counties within the heritage area. It consists of three distinct sections. The Gettysburg-Newark Lowland section is the most extensive and is characterized by low rolling hills and shallow valleys that are developed on sedimentary rock. Bedrock consists of sandstones, siltstones, and shale. The soils in this section range from well drained to poorly drained silty loams that are often red in color.

Southeastern Montgomery County, northwestern Philadelphia, and much of Chester County are located in the Piedmont Upland Section. This section is characterized by gently rolling hills that developed on metamorphic schists and gneiss. Soils are generally well drained silt loams that form from the schists.
The Piedmont Lowland Section is a narrow valley that extends across the heritage area. It is located mostly in Chester County where it is known as the Chester Valley. This section is characterized by limestone and dolomite bedrock and karst topography. Soils in the area are often fertile and well drained silty loams.

In northwestern Philadelphia County, the Schuylkill River crosses the fall line from the uplands of the Piedmont province into the generally flat Atlantic Coastal Plain province. The area is characterized by unconsolidated sand and gravel underlain by metamorphic bedrock. Soils usually consist of well drained loams where they have not been urbanized.

### 3.2.2 Water Resources and Quality

#### A. Surface Water Resources

The Schuylkill River is the principal water resource in the heritage area (Figure 3-2). It originates in the mountains of Schuylkill County as the Little Schuylkill, Main Branch, and West Branch. The Little Schuylkill and Main Branch combine at Port Clinton to form the Schuylkill River, which generally flows southeast from Schuylkill County. Along its path the river flows through forested uplands and rich agricultural regions, forms the Montgomery and Chester County border, and eventually flows through Philadelphia and into the Delaware River. It has several major tributaries, the two largest being Tulpehocken Creek and Perkiomen Creek. Other major tributaries include French Creek, Manatawny Creek, Maiden Creek, and Wissahickon Creek. There are also several lakes within the heritage area, many of them formed by impoundments or dams on the Schuylkill River or its major tributaries. Significant lakes include the Blue Marsh Lake, Lake Ontelaunee, and the Green Lane Reservoir.

The Schuylkill River is the main water source for the City of Philadelphia and together with its tributaries provides drinking water for other communities within and near the heritage area. The river and tributary creeks also provide water for power generation, mining, and other important industries; recreational opportunities; and an important ecological system for fish and native wildlife. In 1987, the Schuylkill River was designated Pennsylvania's first Scenic River. Parts of French Creek and Tulpehocken Creek have also been designated Scenic Rivers.
### Table 3-2. Exceptional Value Streams in the Schuylkill River Valley National Heritage Area

<table>
<thead>
<tr>
<th>Stream</th>
<th>County</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rattling Run</td>
<td>Schuylkill</td>
<td>Source to Route 61</td>
</tr>
<tr>
<td>Saucony Creek</td>
<td>Berks</td>
<td>Source to Route 1029</td>
</tr>
<tr>
<td>Peter's Creek</td>
<td>Berks</td>
<td>All</td>
</tr>
<tr>
<td>Northkill Creek</td>
<td>Berks</td>
<td>Source to Route 78</td>
</tr>
<tr>
<td>Hay Creek</td>
<td>Berks</td>
<td>Source to River Mile 8.1, Beaver Run to Birdsboro</td>
</tr>
<tr>
<td>Pine Creek</td>
<td>Berks</td>
<td>All</td>
</tr>
<tr>
<td>Beiber Creek</td>
<td>Berks</td>
<td>All</td>
</tr>
<tr>
<td>Trout Run</td>
<td>Berks</td>
<td>All</td>
</tr>
<tr>
<td>French Creek</td>
<td>Chester</td>
<td>Source to Beaver Run</td>
</tr>
<tr>
<td>Birch Run</td>
<td>Chester</td>
<td>All</td>
</tr>
<tr>
<td>Valley Creek</td>
<td>Montgomery/Chester</td>
<td>All</td>
</tr>
</tbody>
</table>

A number of streams have been designated as Exceptional Value streams by the Pennsylvania Department of Environmental Protection (DEP) due to their excellent water quality and ecological importance. This designation also ensures special protections from permitted activities that may compromise water quality or critical habitat in the watershed. Table 3-2 lists the exceptional value streams in the heritage area.

Water quality in the heritage area is variable, but has been steadily improving over the last 30 years. A number of factors have been responsible for this improvement, including the passage of the Clean Water Act, an increased awareness of environmental and water related issues, and restoration activities by local governments and non-profit organizations. In the early 1900s, the Schuylkill River and its tributaries suffered from siltation from agricultural practices and runoff from abandoned mines. It was also used as an open sewer by residents and industrial practices that discharged untreated wastes into the river. During this time the river was thick with coal silt and degraded by heavy metals and pathogens. Since that time period, there has been a major overhaul in the way the river has been treated. Industrial practices have ceased dumping untreated waste into the river. Runoff and siltation are contained from roads, coal mines, agricultural areas, and new construction. Water quality monitoring occurs frequently throughout the heritage area to measure progress and locate problem areas. Local and state governments as well as nonprofit organizations have actively been working to restore the heritage area’s wetlands, streambanks, floodplains, abandoned coal mines, and abandoned industrial sites.
These efforts have restored the river as a recreational resource and provide a basis for future improvements.

Despite the improvements, many watercourses in the heritage area continue to experience significant stress, including the Schuylkill River itself. Major sources of contamination in the heritage area include:

• **Abandoned Mine Drainage:** Abandoned mine drainage is one of the two largest contributors to water quality contamination in the heritage area. It occurs from runoff out of abandoned coal mines in Schuylkill County and primarily affects the headwaters of the Schuylkill River (the Upper Schuylkill River and the Little Schuylkill River).

• **Urban Runoff:** Urban runoff is a potential source of contamination where impervious surfaces associated with development increase the quantity and rate of stormwater flows into surface water resources. It is of greatest concern in the watersheds of Wissahickon Creek and Perkiomen Creek in Montgomery and Philadelphia Counties.

• **Agricultural Runoff:** Agricultural runoff is a significant source of contamination in the heritage area. Water quality degradation in several small stretches of stream, most of which are in the Tulpehocken Creek Watershed in Berks County, is attributed to agricultural runoff.

• **Wastewater Systems:** Malfunctioning on-lot septic systems and overflow from municipal wastewater treatment plants is a source of contamination in the heritage area, especially in the Perkiomen, Wissahickon, and lower Schuylkill watersheds.

• **PCBs and Mercury:** PCB and mercury contamination of fish tissue has prompted the establishment of fish consumption advisories throughout the heritage area. These advisories suggest limiting consumption of certain types of fish, especially for high risk populations.

There are several efforts underway to assess and protect water quality within the heritage area. The Philadelphia Water Department (PWD) administers the Source Water Assessment Program that is mandated by the federal Safe Drinking Water Act. PWD is currently inventorying the potential sources of contamination in the watershed and developing a plan to protect water quality and provide high quality drinking water. A number of nonprofit watershed organizations are active in the heritage area. Typical activities of these organizations include monitoring local streams, restoring critical streambanks and habitat, and protecting waterways through land acquisitions. The Pennsylvania DEP monitors the health of streams in the heritage area as part of its obligations under the Clean Water Act. The Stroud Water Research Center also monitors...
the biological health of streams within the heritage area at several sampling stations.

**B. Wetlands**

Wetlands are limited within the heritage area, accounting for less than one percent of the land area. The greatest concentration of wetlands is found in the headwaters of the Perkiomen Creek, French Creek, Manatawny Creek, and Tulpehocken Creek. There are also significant wetlands in the headwaters of the Schuylkill River in Schuylkill County. Wetlands are less extensive in much of Philadelphia, Chester, and Montgomery Counties, which are downstream from these areas.

In addition to naturally occurring wetlands, wetlands are being created and restored in the heritage area. This is occurring most significantly in Schuylkill County, where wetlands are incorporated into the design of abandoned mine projects to diversify habitat. They also assist in the removal of contaminants in polluted water. Wetland restoration is also occurring in other areas. In Berks County, wetlands are being created and restored to mitigate the effects of agricultural runoff. In Chester County, wetlands are restored or created as mitigation for public and private development. In Philadelphia and Montgomery Counties, wetlands are being restored to mitigate the effects of urban runoff and streambank erosion. Much of this work is taking place in the Wissahickon Creek watershed.

**C. Floodplains**

Floodplain resources in the heritage area include the floodway and 100-year floodplain defined by the Federal Emergency Management Agency (FEMA) for the Schuylkill River and its tributaries. Residents of the heritage area have historically lived close to these waterways due to their reliance on water for various purposes. Thus industrial, agricultural, and residential land uses are all common within the 100-year floodplain. As a result, flooding threatens economic interests, recreational interests, and water quality in portions of the heritage area.

State, federal, and local laws restrict development in the floodway and floodplain. However, these laws restrict future development and improvements within the floodplain, not current uses. Floodplain restrictions are set at the municipal level in the heritage area and can vary, though they must at least comply with FEMA regulations. Typically, new construction is prohibited within the floodway but permitted within the 100-year floodplain if certain conditions are met.
3.2.3 Vegetation and Wildlife

A. Vegetation

Forests are the native vegetation of most of the Schuylkill River Valley National Heritage Area, which lies within the Eastern Broadleaf, Central Appalachian Broadleaf, and Outer Coastal Plain Mixed Forest Ecoregional Provinces. Five subsections are dominant within these provinces:

- **New Jersey Inner Coastal Plain Subsection**: This subsection encompasses the smallest portion of the heritage area, generally corresponding to the Atlantic Coastal Plain Physiographic Province in Philadelphia. It is characterized by an Oak and Beech dominated forest in areas that are not urbanized.

- **Piedmont Upland Subsection**: This subsection is located along the Piedmont Upland Physiographic Province. It is characterized by an Oak dominated forest with a Heath shrub understory. Dominant trees include chestnut oak, scarlet oak, black gum, sassafras, gray birch, and red maple. Typical shrub and herbaceous vegetation varies but can include blueberry, huckleberry, sweet fern, mountain laurel, bracken fern, Canada mayflower, ricegrass, and wild sarsaparilla.

- **Gettysburg Piedmont Lowland Subsection**: This subsection encompasses much of the rest of Montgomery and Chester Counties within the heritage area. It is dominated by a Red Oak-Hardwood Mesic Forest. Dominant trees include red oak, red maple, black oak, white oak, sweet birch, yellow birch, and beech. Shrub and herbaceous vegetation often includes arrowwood, maple leaved viburnum, shadbush, mountain laurel, hayscented fern, blue cohosh, and wild-oats. Much of the area covered by this subsection is in agricultural use, as it is well suited for farming when cleared of native vegetation.

- **Northern Great Valley Subsection**: Mostly located in the southern part of Berks County in the Great Valley Physiographic Province, this subsection consists of Oak-Heath-Dry Forest and Chinquapin Oak Forest. The Chinquapin Oak Forest occurs on fertile limestone soils and has a rich herb understory. The Oak-Heath-Dry forest is dominated by scarlet and white oak, red maple, gray birch and a heath shrub understory. Much of this subsection is in agricultural production due to its fertile soils.

- **Northern Ridge & Valley Subsection**: This subsection covers much of Schuylkill and northern Berks Counties. It is characterized by two forest types, the Oak-Heath-Dry Forest and the Oak-Pine Forest. The Oak-Pine Forest is characterized by red and white oak, white pine, hemlock, and red maple. The understory includes witch hazel,
blueberry, mountain laurel, and huckleberry. Most of this area is forested, interspersed with pockets of agricultural production.

In addition to these general communities, the heritage area has several localized vegetative communities:

- **Floodplains**: Common vegetation along streams and in floodplain areas includes red maple, silver maple, box elder, river birch, sycamore, ironwood, witch hazel, and elderberry.

- **Wetlands**: Wetlands are scattered throughout the heritage area and vegetation can vary greatly.

- **Abandoned Mine Lands and Cleared Lands**: Disturbed lands usually support vegetation that is most adaptable to harsh conditions. Gray birch, aspen, black locust, sumac, box elder, and several types of herbaceous growth are typical species found in these areas.

### B. Wildlife

Wildlife is abundant within the heritage area. Deer can be found throughout the Schuylkill River Valley. In some areas, notably Fairmount Park in Philadelphia, overabundance of deer causes problems such as overgrazing of native vegetation. Skunk, raccoon, squirrel, and chipmunk can be found in almost any wooded area and in many residential areas.

While present in the heritage area, black bear are mostly found in the mountains of Schuylkill County and occasionally the more rural sections of Berks County. Very occasionally a black bear wanders into residential areas of Chester and Montgomery counties. Coyote have made a comeback in recent years due to their ability to adapt to changing conditions and now occur throughout the heritage area except for the most urbanized locations. However, due to their secretive nature, coyote are rarely seen. Turtles can be found throughout many of the moist habitats of the heritage area, mostly in wetlands and along river banks. Other wildlife that can be found in the heritage area include woodchuck, many bird species, snakes, and several fish species.

### C. Threatened and Endangered Species

The Pennsylvania Department of Conservation and Natural Resources and The Nature Conservancy maintain the Pennsylvania Natural Diversity Inventory (PNDI). The PNDI identifies and monitors flora and fauna species and ecological communities in Pennsylvania. The Schuylkill River Valley National Heritage Area is home to several species of concern. Table 3-3 lists those species or communities within the heritage area that are listed as globally imperiled or vulnerable.
Table 3-3. Threatened and Endangered Species in the Schuylkill River National Heritage Area

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Global Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flypoisin Borer Moth</td>
<td>Imperiled/Vulnerable</td>
</tr>
<tr>
<td>Fizzini's Cave Amphipod</td>
<td>Imperiled/Vulnerable/Apparently Secure</td>
</tr>
<tr>
<td>Spreading Rockcress</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Bog Turtle</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Frosted Elfin</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Bog Bluegrass</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Regal Fritillary</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Price's Cave Isopod</td>
<td>Vulnerable</td>
</tr>
<tr>
<td>Northern Metalmark</td>
<td>Vulnerable/Apparently Secure</td>
</tr>
<tr>
<td>A Sallow Moth</td>
<td>Vulnerable/Apparently Secure</td>
</tr>
<tr>
<td>A Hand-Maid Moth</td>
<td>Vulnerable/Apparently Secure</td>
</tr>
<tr>
<td>Abbreviated Clubtail Dragonfly</td>
<td>Vulnerable/Apparently Secure</td>
</tr>
<tr>
<td>Doll's Merolonche</td>
<td>Vulnerable/Apparently Secure</td>
</tr>
<tr>
<td>Allegheny Woodrat</td>
<td>Vulnerable/Apparently Secure</td>
</tr>
</tbody>
</table>

D. Aquatic Ecosystems

Aquatic ecosystems are an important heritage area resource; much of the region's history and heritage can be traced to the Schuylkill River and its tributaries. The fish industry, particularly shad, once thrived along the Schuylkill River. In the early 1800s, shad was a reliable source of food and fertilizer. Dried shad is credited as saving George Washington's troops from starvation when they were camped in Valley Forge. Today, the aquatic ecosystem is fragmented by dams and stressed by variable water quality. Dams of all different sizes and purposes fragment habitat, increase water temperature, impede nutrient and sediment flow, and are costly to maintain. Shad can only be found in the extreme lower portions of the Schuylkill River, as they are unable to migrate further. Several other species of fish can be found in the heritage area, including popular sport fish such as bass and trout. However, fish consumption advisories remain in effect statewide and for several of the region's waterways.

Efforts are underway to improve the aquatic ecosystem in the heritage area. Dams are slated for removal or fish passage, particularly on the Schuylkill River. Shad is being restored and along with other fish species will likely have pathways back to spawning grounds in the near future. It is estimated by the Pennsylvania Fish and Boat Commission that the return of shad to the Schuylkill River could generate $2.5 million in annual revenue from fishing trips.

Fishing is a common recreational pursuit in the heritage area. Trout are stocked in most of the popular tributaries, including Wissahickon.
Creek, Perkiomen Creek, French Creek, Pickering Creek, Perkiomen Creek, Skippack Creek, Tulpehocken Creek, and Maiden Creek. A number of creeks in the heritage area support native trout populations, particularly in Berks and Schuylkill Counties. Fishing is encouraged in all of the heritage area state parks.

3.2.4 Prime Farmland

The Schuylkill River Valley has a rich agricultural heritage that stems from an abundance of productive soils. Many of these soils are classified as prime farmland soils by the United States Department of Agriculture (USDA). The USDA designates prime farmland in order to identify, create an awareness of, and preserve well-suited agricultural soils and regions. A number of factors combine to make portions of the Schuylkill River Valley exceptionally fertile.

Prime farmland soils are usually located in a region where there is an adequate growing season, sufficient moisture supply, and nutrient rich bedrock. In the heritage area, prime farmland is often found where nutrient rich bedrock is most widespread. Prime farmland is most extensive in the southern portion of the Great Valley Section of the Ridge and Valley Physiographic Province. This area generally falls in the Maiden Creek, Tulpehocken Creek, and the upper Manatawny Creek watersheds of Berks County. A band of prime farmland also occurs along the southern border of the Great Valley Section to the northeast, east, and northwest of Reading. This area is exceptionally fertile due to the flat landscape that has developed on nutrient rich limestone and dolomite bedrock.
Prime farmland can also be found scattered throughout the following regions:

- In Schuylkill County, prime farmland soils occur in many of the undeveloped valleys where coal mining has not taken place. In this area, the Appalachian Mountain Section of the Ridge and Valley Province has valleys that are underlain by limestone, dolomite, and siltstone. Prime farmland occurs primarily within the Little Schuylkill River Watershed.

- In the Piedmont Province of Chester and Montgomery Counties, prime farmland is located in selected valleys where development has not occurred and rich sedimentary bedrock is present. The greatest concentration in this area occurs in the French Creek and lower Manatawny Creek watersheds. Prime farmland also occurs along a relatively narrow band of limestone that underlies part of the Piedmont Province. This band traverses the area from northwest to southeast, crossing the Schuylkill River in the area of Valley Forge National Historical Park and the confluence of the Perkiomen Creek.

The occurrence of prime farmland is limited in several sections of the Schuylkill River Valley National Heritage Area:

- Prime farmland is limited in Philadelphia and Montgomery Counties. This is partially due to the lack of nutrient rich bedrock, but also due to development. In order for an area to be designated prime farmland, it must be available for production. Relatively little land is available for production in these two counties.

- Northern Berks County has limited prime farmland due to the geology and varying topography in the northern part of the Great Valley Section. This area is characterized by undulating hills and nutrient poor shales and siltstones that are not optimal for farming.

- Much of Schuylkill County is lacking prime farmland due to the mountains in this part of the Ridge and Valley Province. This area has also been heavily mined, reducing the availability of prime farmland soils.

**3.3 RECREATIONAL RESOURCES**

The mission established for the Schuylkill River Valley National Heritage Area addresses recreational as well as natural, historic, and cultural resources. Recreational opportunities are abundant within the heritage area. The area is home to a national historical park which supports regional scale recreational activities, several state parks, and many regional and local parks. The diversity of the watershed from the urban setting in Philadelphia to the ridge and valley landscape in
Schuylkill and Berks Counties allows for the enjoyment of a variety of recreational activities. In addition to the many parks and recreational areas, the river, its tributaries, and adjoining lands are an extensive recreational resource.

The following text describes regionally significant parks and recreation resources located within the heritage area. These resources are shown on Figure 3-1.

### 3.3.1 National and State Parks

- **Valley Forge National Historical Park:** Valley Forge, located in Chester and Montgomery Counties along the Schuylkill River, is best known for its historic significance. However, the park offers many recreational opportunities over its 3,466 acres. Fishing, hiking, biking, running, walking, horseback riding, boating, birding, cross-country skiing, and picnicking are all encouraged activities. The Betzwood picnic area, located on the Montgomery County side of the River, is the terminus of the heavily used Valley Forge to Philadelphia Bike Trail (extended in the spring of 2002 northward to the Perkiomen Trail). The park also features a nature center.

- **Hopewell Furnace National Historical Site:** Like Valley Forge, Hopewell Furnace is best known for its historic significance as one of the finest examples of a rural American 19th century iron plantation (see Section 3.1.2D). Hopewell Furnace is located on 848 mostly wooded acres surrounded by French Creek State Park.

- **Appalachian National Scenic Trail:** A well-known recreational resource that traverses the heritage area along the ridge that forms the Berks/Schuylkill County line (see Section 3.3.4), the Appalachian Trail is a unit of the National Park System managed by the National Park Service.

- **Evansburg State Park:** Evansburg State Park is a 1,872-acre park located along the Skippack Creek in Skippack Township, Montgomery County. Recreational opportunities within the park include an 18-hole golf course, hunting, fishing, hiking, biking, softball fields, horseback riding, and picnicking.

- **Fort Washington State Park:** Fort Washington is a 493-acre park located along the Wissahickon Creek in eastern Montgomery County near the Towns of Fort Washington and Flourtown. Recreational activities include softball, picnicking, hiking, dog walking, group tent camping, fishing, sledding, and cross country skiing.

- **French Creek State Park:** French Creek State Park covers 7,339 acres in northwestern Chester and southwestern Berks Counties.
The park offers many recreational opportunities including camping, fishing, boating, swimming, picnicking, disc golf, orienteering, hunting, hiking, and horseback riding.

- **Locust Lake State Park:** Locust Lake State Park is situated on 1,089 acres in Schuylkill County, seven miles north of Pottsville. Recreational opportunities include camping, biking, boating, fishing, swimming, ice skating, ice fishing, sledding, and hunting. The park also has three playgrounds.

- **Tuscarora State Park:** This 1,618-acre park is located two miles west of Tamaqua in Schuylkill County. Recreational activities include boating, swimming, picnicking, fishing, hunting, ice skating, ice fishing, sledding, and hiking.

### 3.3.2 Other State Lands

- **State Gamelands:** The majority of state gamelands in the heritage area are located along the ridgeline that straddles the Schuylkill and Berks County line. Other gamelands exist in Montgomery, Chester, Berks and Schuylkill Counties but are smaller and scattered in their occurrence. Permitted activities include hunting and fishing during open season, hiking, and non-motorized riding in authorized locations.

- **Weiser State Forest:** Several tracts of the Weiser State Forest are located within Schuylkill and Berks Counties in the Schuylkill Watershed. The Appalachian Trail traverses the Weiser State Forest in this area. The forest covers areas where mountain water originates and provides drinking water for local communities such as Port Clinton. Hunting, fishing, hiking, cross-country skiing, mountain biking, horseback riding, snowmobiling, and ATV riding are all permitted recreational activities in the forest.

### 3.3.3 Other Regional Parks and Recreation Areas

- **Fairmount Park:** Fairmount Park is the name used for the Philadelphia Park System. The largest of these parks, usually referred to as Fairmount Park, is located along the Schuylkill River in Philadelphia from the Art Museum west to the Philadelphia City Line. The park includes the Wissahickon Valley, which is located along the Wissahickon Creek in the Germantown, Mount Airy, and Chestnut Hill sections of Philadelphia. Permitted activities within the park and along the river include rowing, hiking, biking, horseback riding, fishing, picnicking. There are also softball, baseball, and soccer fields within the park.

- **Green Lane Reservoir:** Managed by Montgomery County, the Green Lane Reservoir is located in northwestern part of the county.
at the northern end of the West Branch of the Perkiomen Creek. Recreational activities include fishing, boating, picnicking, horseback riding, hiking, mountain biking, camping, cross country skiing, ice skating, and ice fishing. The park also has an equestrian campground, tennis and sand volleyball courts, and playgrounds.

• **Blue Marsh Lake:** Blue Marsh Lake is located near Leesport in Berks County. The lake is formed by a dam on the Tulpehocken Creek that is maintained by the United State Army Corps of Engineers. Recreational opportunities in the Blue Marsh Lake area include hunting, picnicking, swimming, boating, fishing, cross country skiing, sledding, ice fishing, ice skating, and an extensive trail system for hiking, biking, and horseback riding.

• **Hawk Mountain Sanctuary:** Operated by a non-profit, member-supported organization, Hawk Mountain Sanctuary is a 2,400-acre natural area on the Kittatinny Ridge that forms the Berks and Schuylkill County line. The sanctuary is a refuge for raptors and provides excellent wildlife viewing opportunities, especially for migrating birds and birds of prey. Hiking and walking is encouraged on Sanctuary grounds. The Appalachian Trail passes close by the Sanctuary and trails from the Sanctuary connect to it.

• **Warwick County Park:** Located four miles west of Routes 100 and 23 in Chester County, this 550-acre park offers a variety of recreational opportunities in a natural setting comprised of hardwood forest, meadows, wetlands, and French Creek. In the 18th and 19th centuries the forests within the park provided much of the raw timber used to make charcoal for the region’s iron furnaces and forges. Remains of the iron industry can still be seen at various charcoal hearths and along old cart paths.

• **Norristown Farm Park:** The Norristown Farm Park is located in Montgomery County next to the Borough of Norristown. Formerly farmed as part of the Norristown State Hospital, this park is now managed by the County and supports a working farm and visitors center. Recreational opportunities include hiking, biking, picnicking, and fishing.

### 3.3.4 Other Recreational Resources

• **Appalachian Trail:** The Appalachian Trail traverses the heritage area along the ridge that forms the Berks and Schuylkill County line. Running from Maine to Georgia, the 2,167-mile trail is a well known hiking corridor that is used by day, short-term, section, and through hikers. Approximately 30 miles of the trail cross through the heritage area, mostly within state gamelands. The trail passes through the community of Port Clinton at State Route 61.
• **Schuylkill River Trail:** The Schuylkill River Trail, when completed, will connect Philadelphia to Pottsville and beyond via a multi-use path along the Schuylkill River. A number of regional and local trails currently connect to the Schuylkill River Trail and several more will join it in the future. Completed sections of the trail include the segment from Philadelphia to Perkiomen Creek and smaller segments near Reading and Hamburg. Several other segments are currently either in the design stage or under study.

• **Schuylkill River Water Trail:** The Schuylkill River Water Trail is a series of boat landings and riverside parks that allow canoeists, kayakers, and boaters to access and travel on the Schuylkill River. Significant parks along the Schuylkill River Water Trail include Schuylkill Haven Island Park, Riverfront Park in Reading, Poplar Neck Park in Cumru Township, Riverfront Park in Pottstown, Upper Schuylkill Valley Park in Upper Providence Township, Riverfront Park in Norristown, Flat Rock Park in Lower Merion Township, and Fairmount Park in Philadelphia. In May 2002 the Schuylkill River Water Trail was designated as a National Recreation Trail in accordance with the National Trails System Act of 1968.

• **Perkiomen Trail:** The Perkiomen Trail is currently under development and will connect the Green Lane Reservoir to the Schuylkill River via a path along the Perkiomen Creek and the West Branch of the Perkiomen Creek. Northern and southern portions of the trail from Green Lane Reservoir to Spring Mount and from the Valley Forge National Historical Park to Collegeville were completed in the fall of 2001 and spring of 2002, respectively.

• **Horseshoe Trail:** Over 130 miles in length, the Horseshoe Trail runs west from Valley Forge National Historical Park through Chester and Berks Counties, eventually crossing into Lancaster County and connecting with the Appalachian Trail just north of Hershey.

### 3.4 LAND USE

#### 3.4.1 Generalized Land Cover

Land use in the heritage area varies from developed urban centers and suburbs to agricultural and forested lands. The most recent land cover information for the heritage area is the National Land Cover Dataset developed by the United States Geological Survey (USGS) in 1992-1993. According to this source, forest is the dominant land cover in the heritage area, accounting for approximately 62% of the area’s 292,118 acres. This cover includes deciduous, evergreen, and mixed forests, as well as shrubland. Agricultural uses, including orchards, grasslands, fallow, pasture, and crop lands, are also significant, encompassing 32%
of the heritage area. Developed lands account for approximately 5% of the land area. Figure 3-4 provides a generalized depiction of land cover in the heritage area based upon the USGS dataset.

Land cover and uses vary according to the region, county, and watershed. Schuylkill County and the Upper Schuylkill and Little Schuylkill River watersheds are mostly forested. However, a significant amount of land in this area is occupied by abandoned coal mines, tracts in transition from past mining activities (regenerating or being remediated), and current mining uses. This unique landscape is the legacy of the anthracite coal mining industry that once thrived in Schuylkill County. The largest urban area is the City of Pottsville. Other developed areas include the towns of Tamaqua, Minersville, New Philadelphia, Schuylkill Haven, Frackville, Ashland, Mahanoy City, Shenandoah, and Middleport. Open water areas include the Little and Upper Schuylkill Rivers and their tributaries, several small lakes, and abandoned mines that have filled with water. Wetlands are present, but are small and scattered. Many wetlands have been created during restoration of the abandoned mine lands. Agricultural lands are present in isolated valleys where lack of coal seams precluded mining.

In Berks County, agriculture is the prevailing land use, particularly in the Tulehocken Creek and Maiden Creek watersheds and parts of the Manatawny Creek watershed. Much of the heritage area’s Prime Farmland lies within the Great Valley, which stretches across much of Berks County. Forested land is prevalent along the Blue Mountain ridge and in the hills to the east of Reading that form the Reading Prong Section of the New England Physiographic Province. Forested lands are also present in the upper portions of the French Creek watershed and to the west of the Schuylkill River between Reading and the southern Berks County border. Reading is the most prominent urban area in the region. Other urbanized areas include Birdsboro, Kutztown, Hamburg, and Boyertown.

Land use in Chester County is varied. Much of the northwestern and southwestern parts of the county within the heritage area are forested, including much of the French Creek watershed and the area to the west of Valley Forge National Historical Park in the Valley Creek and Pickering Creek watersheds. Significant agricultural areas include the lower part of the French Creek watershed, the area south of the Schuylkill River and north of the French Creek, and the upper part of the Pickering Creek watershed west of Phoenixville. Urban areas include Phoenixville, Spring City, Malvern, and parts of the US Route 30 corridor.

Montgomery County and Philadelphia County account for most of the urban uses within the heritage area. However, Montgomery County is quite diverse, with significant forested and agricultural land in addition
to urban uses. The primary forested area of the County is the upper portion of the Perkiomen Creek watershed, mainly in the vicinity of the Green Lane Reservoir. Other forested areas include the greenway along the Wissahickon Creek and Evansburg State Park. Many pockets of agricultural land use also exist in Montgomery County, including land in the lower portion of the Perkiomen Creek, along the East Branch of the Perkiomen Creek, and in the Swamp Creek watershed northeast of Pottstown. Significant urban areas include Pottstown, Collegeville, Royersford, Lansdale, Norristown, Conshohocken, and the west Philadelphia suburbs.

Philadelphia is the dominant urban area in the heritage area. While other uses are limited in extent, a large forested area does exist along the Wissahickon Valley portion of Fairmount Park. Parts of the Roxborough, Chestnut Hill, Germantown, and Mount Airy sections of Philadelphia are forested as well.

### 3.4.2 Land Use Issues

Land cover in the Schuylkill River Valley is a result of the area’s natural and cultural heritage. The area’s natural heritage is reflected in the rivers and forested lands that are prevalent across much of the landscape. As described in Section 3.3, cultural heritage is reflected in the area’s agricultural lands, historical sites, industrial complexes, and abandoned mine landscapes. A number of land use related issues pose potential threats to natural and cultural resources in the heritage area:

- The conversion of farmland and forested lands threatens natural resources and historic landscapes. Land development in much of the heritage area has far outpaced population growth. Although the designation of parkland and the preservation of farmland has increased in the region, farmland and forested lands are still being acquired and developed.

- Remnants of historical industrial practices in the heritage area impede waterfront access, hinder recreational opportunities, contribute to water quality degradation, and are a blighting influence in many communities. Dams, abandoned mine lands, and vacant industrial sites can be found throughout the heritage area.

- Natural and cultural resources are vulnerable due to the expansiveness of the heritage area and fragmentation of the communities, habitats, and local destinations. The heritage area is naturally divided into different physiographic and vegetative zones. Multiple political units, including counties, townships, and boroughs, contribute to its fragmentation. Local and regional land use issues in distant reaches of the heritage area may not be apparent to residents or government officials. Likewise, residents or tourists many not be aware of local...
and regional parks and historic sites. In addition, the number of governing bodies within the heritage area could lead to a lack of coordination that may impede the preservation of critical resources.

In response to these issues there are many active programs to preserve heritage resources. Natural resources in the region are being protected as state gamelands, state and local parks, and state forests. Resources are also being protected through the Pennsylvania Growing Greener Program, watershed conservation planning, county open space programs, non-profit land trusts, and other local efforts.

Cultural resources are being protected through reinvestment in urban areas, restoration of abandoned industrial and mine lands, and the conservation of farmland and historical landscapes. Abandoned mine lands in Schuylkill County are being restored by state and federal agencies with funding from the Pennsylvania Growing Greener Program, federal grants from the Office of Surface Mining, and forfeited reclamation bonds. Abandoned industrial buildings and sites are being restored and reused through local grants and brownfield redevelopment programs, such as Pennsylvania’s Land Recycling Program. One particular success story is the restoration of the former Phoenixville Iron and Steel Company site in Phoenixville; other significant restoration efforts underway include the Tamaqua Train Station and sections of the Schuylkill Canal. The management entity for the Schuylkill River Heritage Corridor, the Schuylkill River Greenway Association, is playing a key role in many of these projects through Pennsylvania’s Heritage Parks Program.

Farmland preservation efforts are also being actively pursued within the heritage area. Enacted in 1988, the Pennsylvania Agricultural Conservation Easement Purchase Program has been especially effective in preserving agricultural land through the purchase of conservation easements from land owners. The program is administered in Schuylkill, Chester, Berks, and Montgomery Counties by County Agricultural Land Preservation Boards. From 1989 to 2000, over 11,700 acres of farmland has been preserved in Chester County through this program, much of it in the heritage area. In Berks County, over 23,000 acres of county agricultural land have been preserved through this program, most of it within the heritage area. Local land trusts are also actively preserving farmland, often working with municipal and county officials.

Other programs in the Schuylkill River Valley National Heritage Area are being implemented to address a range of issues through one coordinated initiative. In Montgomery County, 16 boroughs and townships are collaborating in the development of the Schuylkill River Greenway. The initiative will protect open space along the river corridor and provide recreational opportunities and access to the waterfront. It
will revitalize urban centers and industrial complexes and protect and enhance historic sites and historic landscapes. A significant greenway has also been protected along the Wissahickon Creek.

The development of the Schuylkill River Trail is another collaborative effort that will help to protect and enhance heritage resources. The trail will eventually run from Schuylkill County to the confluence of the Schuylkill and Delaware Rivers in Philadelphia. Along its path it will utilize many local parks, connect industrial sites and historic waterfront towns, and traverse natural areas. It will connect to several local trails that provide access to additional parks, natural areas and historic landscapes.

### 3.5 SOCIO-ECONOMIC CONDITIONS

#### 3.5.1 Visitor Attractions and Levels of Use

The majority of the visitor attractions and tourism infrastructure in the Schuylkill River Valley National Heritage Area are located in the area’s major population centers of Philadelphia, Reading, and the Valley Forge/King of Prussia region of Montgomery and Chester Counties. Current offerings are relatively limited in other parts of the heritage area including the smaller population centers of Pottsville, Phoenixville, and Pottstown. Attractions in rural sections of the heritage area are especially limited, as these areas lack adequate lodging, dining, and entertainment choices.

Philadelphia is the focal point for tourist activities within the heritage area. Major attractions in the City include the Liberty Bell and Independence Hall, the Franklin Institute, Philadelphia Museum of Art, and Center City’s shops, restaurants, and historic sites. The City is highly accessible via a number of expressways and roads, public transit, and an international airport.

Montgomery County’s tourism market is varied. The largest attractions in Montgomery County are Valley Forge National Historical Park (located partially in Montgomery and partially in Chester County) and the King of Prussia Mall in the southern part of the heritage area. The mall is the largest in Pennsylvania, and Valley Forge attracts approximately two million visitors each year. Attractions in other parts of Montgomery County are somewhat limited. Much of the county’s visitor infrastructure is located along the Pennsylvania Turnpike. Lodging and dining opportunities are less well developed away from the Turnpike and in many of the county’s larger boroughs.

In Chester County, the Valley Forge National Historical Park draws many visitors to the area. However, the majority of visitor attractions
are located in the southern portion of the county away from the heritage area.

Reading is the center of tourism for Berks County. Many of the visitor attractions are located within the City, including the Reading Outlets. Berks does have many rural attractions, including Kutztown, Hopewell Furnace, and Dutch Hex barns, but these areas lack visitor amenities.

Schuylkill County does have several visitor attractions but lacks an overall tourist identity. The most significant attractions include the Yuengling Brewery in Pottsville and the Pioneer Tunnel Coal Mine in Ashland. These attractions draw 60,000 and 40,000 tourists each year respectively.

A new attraction planned near the Berks/Schuylkill County line will significantly increase visitation to the area. Cabela’s, a major retailer of hunting, fishing and outdoor gear, is building a 225,000-square-foot store, its first East Coast location, at the intersection of I-78 and Route 61 near Hamburg. Cabela’s stores have become major tourist attractions due to features such as museum-quality animal displays, indoor archery ranges, and stocked aquariums. Anticipated to be open for business by late fall 2003, the store is expected to attract 6 million customers a year.

3.5.2 Visitor Market Characteristics

A. Primary Market

The Schuylkill, Berks, Chester, Montgomery, and Philadelphia five-county region is the primary market for tourism in the heritage area. An understanding of the region’s population characteristics, employment profiles, and demographic trends will help to determine potential use of tourist attractions from this core group as well as potential economic impacts from increased heritage tourism.

The overall population of the five heritage area counties has been relatively stable between 1950 and 2000, peaking in 1970 at 3.31 million persons. Recent trends have included population decline in Philadelphia and increases in the surrounding counties. Berks, Chester, and Montgomery Counties have all experienced significant growth between 1950 and 2000, while Philadelphia’s population has been consistently falling over that time period. Schuylkill County, which has no connection to a major metropolitan area, has been steadily declining in population since the peak of the coal industry in 1930. Future estimates for these areas project moderate to aggressive growth in Chester, Berks, and Montgomery Counties and moderate losses in Philadelphia and Schuylkill Counties.

Characteristics of the resident market are variable among the five counties. Philadelphia has a high concentration of 18-24 year olds and...
children under the age of 18. Montgomery County and Chester County have high concentrations of middle-aged families. Schuylkill County has a high concentration of senior citizens. Montgomery and Chester Counties have the highest per-capita and median household incomes. Philadelphia and Schuylkill Counties have the lowest. Berks County follows the regional average in both categories, moderating between the suburban and rural counties.

The economy of the five-county region has been steadily changing from a manufacturing to service base. Philadelphia and Schuylkill Counties lost 76 percent and 39 percent of their manufacturing jobs, respectively from 1970 to 1999. Overall, the region lost 27 percent of its manufacturing jobs. Other sectors have seen significant losses as well. Schuylkill and Berks Counties have each lost more than 50 percent of their mining jobs. Philadelphia lost 62 percent of its wholesale jobs, while wholesale jobs increased in the other counties. The services industry has helped to mitigate much of the losses, more than doubling in size with the most significant increases in Montgomery and Chester Counties.

The average unemployment rate in the heritage area as of February 2002 was 6.1 percent, a significant increase from the previous year. Schuylkill County has the highest unemployment rate at 8.6 percent. Philadelphia is also high at 7.3 percent. Berks and Montgomery Counties experienced the most substantial rise in unemployment over the previous year, but their rates still remain low.

The economic impacts of tourism on a county-by-county basis in the Commonwealth of Pennsylvania are documented in a study conducted for the Pennsylvania Department of Economic and Community Development.\(^\text{10}\) In the five-county heritage area, tourism spending directly produced 69,000 jobs and $1.5 billion in payroll. The job impacts by county were: Philadelphia, 26,000; Montgomery, 15,600; Berks, 13,500; Chester, 8,900; and Schuylkill, 4,500. Taking into consideration the indirect and induced multiplier effects of tourism spending, the study estimated the total economic impact to be $7.3 billion, with tourism spending being responsible for a total of 105,000 jobs with a payroll of $2.62 billion. The job impacts by county were: Philadelphia, 41,000; Montgomery, 25,000; Berks, 19,700; Chester, 13,400; and Schuylkill, 6,000.

**B. Secondary Market**

The secondary tourism market for the Schuylkill River Valley National Heritage Area consists primarily of the New York and Washington/Baltimore metropolitan areas, along with the remainder of Pennsylvania.

and the three states that border the heritage area: Delaware, Maryland, and New Jersey. In total, there are 29.3 million people living in these nearby states and metropolitan areas, representing more than 10 percent of the population of the United States. While there is clearly a deep potential market for tourism from these areas, awareness of the Schuylkill River Valley National Heritage Area is very low and drawing visitors from outside of the region likely would require aggressive cross-marketing with other regional attractions.

C. Heritage Tourism Potential

The potential for enhanced heritage tourism in the Schuylkill River Valley National Heritage Area can be best described using tourist data from the Philadelphia region and visitation to heritage sites in Pennsylvania. One of these sites is the Schuylkill River State Heritage Corridor. Heritage tourism accounts for a large portion of leisure travel to and within Pennsylvania. However, the Schuylkill River State Heritage Corridor was ranked fairly low in awareness among Pennsylvania heritage sites based upon a study conducted for the Pennsylvania Department of Conservation and Natural Resources. According to this study, 26 percent of leisure trips and 40 percent of total expenditures from leisure visitors in 1997 were from tourists visiting heritage sites. Among those visitors that claim heritage sites are a major part of their trip to the State, proximity was given as the greatest reason for doing heritage travel in Pennsylvania. Other motivating factors include the wide variety of activities available, beautiful landscape, superior heritage activities, and good value. Among this same group, awareness of the Schuylkill River Heritage Corridor ranked fairly low compared to the other ten heritage sites in the state at the time of the study. Only 32 percent were aware of the heritage corridor and just 16 percent had visited.

Heritage visitors to Pennsylvania primarily come from within the State. The neighboring states of New Jersey, New York, Maryland, and Ohio also account for a third of heritage tourism from core heritage visitors. A significant number of people who did not visit heritage sites live in Pennsylvania. Heritage visitors that did not engage in heritage related travel in Pennsylvania most often stated that Pennsylvania did not come to mind when planning their trips. Other factors contributing to tourists not visiting Pennsylvania heritage sites include having no family connections in the area and having already seen everything.

Core heritage visitors, those who believe heritage sites are an important part of their trip, tend to be older. As a result, they are not limited in the seasonality of their travel. Most travel from core visitors occurs

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from August through November, peaking in September and October. Moderate visitors are younger with a high percentage of visitors in the 35-49 range. Moderate visitors usually have a higher income than low or core heritage visitors. Low heritage visitors are the youngest and have moderate incomes.

Studies by the Greater Philadelphia Tourism Marketing Corporation show that historic attractions and sites are the most popular destination for tourists to the Philadelphia region (defined as Philadelphia and the four surrounding counties of Bucks, Chester, Delaware, and Montgomery). Other highly ranked attractions were small towns and villages, rural areas, historic houses, and national and state parks. The most popular destination in the Philadelphia area was the King of Prussia Mall. Valley Forge National Historical Park was second. Most often trips to the Philadelphia region were by persons visiting friends and relatives. The greatest percentage of travelers to the Philadelphia region come from within Pennsylvania. New York, Virginia, New Jersey, and Maryland followed after Pennsylvania.

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12 Longwoods International. *Profile of Visitation to the City of Philadelphia vs. Other Four Counties*, 2000
Schuylkill River Valley National Heritage Area Management Plan and Environmental Impact Statement

Figure 3-2
Natural Resources

Map Compiled By: Wallace Roberts & Todd, LLC
Schuylkill River Valley National Heritage Area Management Plan and Environmental Impact Statement

Figure 3-3
Generalized Land Cover

- Developed
- Water
- Wetlands
- Forest
- Agriculture
- Abandoned, Barren & Transitional Lands
- County Boundaries
- Cities and Boroughs

Map Compiled By: Wallace Roberts & Todd, LLC

Data Source: National Land Cover Dataset, USGS, 1992-1993

Map Compiled By: Wallace Roberts & Todd, LLC
4.0 ENVIRONMENTAL CONSEQUENCES
4.0 ENVIRONMENTAL CONSEQUENCES

4.1 METHODOLOGY FOR ASSESSING IMPACTS

This chapter assesses the potential environmental impacts of each of the four alternatives described in Chapter 2.0 on five categories of resources:

- Natural
- Cultural
- Recreational
- Land Use
- Socio-economic Conditions

These categories, each of which encompasses a range of more specific resources, correspond to the major sections of Chapter 3.0 (Heritage Area Environment).

The Schuylkill River Valley National Heritage Area Management Plan is programmatic in scope. Therefore, the Environmental Consequences chapter discusses the types of impacts that could be associated with the strategies and action items emphasized by each of the alternatives (see Table 2-1 for the strategies and their degree of emphasis). The Environmental Consequences chapter does not discuss impacts at the site-specific project level. (Future actions may be required to undergo additional project level environmental assessment prior to implementation as required by the National Environmental Policy Act [NEPA].) Ultimately, implementation of the Plan will depend upon voluntary actions by and partnerships among numerous public and private sector agencies, organizations, and citizens. Hence the impacts on natural resources, cultural resources, recreational resources, and land use are qualitatively discussed below. This discussion is based upon the anticipated effects of each of the four alternatives resulting from factors such as the commitment of funding and other resources, formation of partnerships, level of public recognition, and the actions and strategies that are likely to be emphasized by each alternative.

Quantitative visitation estimates for the four alternatives were developed to provide a basis for determining the potential socioeconomic impacts of the Plan as well as the potential for impacts on resources that may result from increased visitation and use. The methodology used to develop these estimates was as follows (see Appendix D):

1. Baseline annual visitation figures were developed for heritage attractions and events within the Schuylkill River Valley.
2. Reasonable estimates of the percentage increases in visitation to these heritage attractions and events that might occur after five years as a result of each alternative were made.
3. The percentage increases were applied to the baseline visitation figures.

Using this methodology, the baseline estimated visitation and projected visitation for each of the four alternatives after five years are as follows:

- The current baseline annual visitation to the Schuylkill River Valley National Heritage Area is estimated at 5,873,100
- Visitation under Alternative A (No Action) is projected to increase by 76,980 annually over the baseline, to a total of 5,950,080
- Visitation under Alternative B (Places) is projected to increase by 455,620 annually over the baseline, to a total of 6,328,720
- Visitation under Alternative C (Experiences) is projected to increase by 368,460 annually over the baseline, to a total of 6,241,560
- Visitation under Alternative D (Layers) is projected to increase by 952,270 annually over the baseline, to a total of 6,825,370

It should be noted that the majority of the impacts on environmental resources resulting from implementation of the Management Plan are expected to be positive because of the Plan’s resource preservation and enhancement goals. There may be the potential for impacts due to increased visitation and certain types of development that may be generated as a secondary effect of programs and actions taken to implement the Plan. However, the Plan’s emphasis on sustainable land use and community revitalization implies that most development will likely be positive and intended. In addition, any adverse impacts due to visitation will likely be minimal and outweighed by the positive effects of improved economic vitality and natural, cultural, and recreational resource preservation and enhancement. The increased annual visitation of 952,270 projected under Alternative D equates to an average of approximately 2,600 visitors per day distributed over a 1,740-square mile region with a current population of roughly 3.2 million people.
4.2 IMPACTS ON NATURAL RESOURCES

This section discusses potential impacts on the following types of natural resources:

**Water Resources**
- Floodplains
- Wetlands
- Water quality
- Aquatic habitat
- Aquatic threatened and endangered species
- Scenic rivers
- High quality streams

**Land Resources**
- Geology
- Soils
- Prime farmland
- Terrestrial habitat
- Terrestrial threatened and endangered species
- Unique natural features

**Air Quality and Noise**

4.2.1 Impacts on Water Resources

A. Alternative A: No Action

The potential for the most direct physical impacts to water resources under Alternative A will result from the continued implementation of trail segments and water landings as part of the Schuylkill River Trail and Water Trail. Measures will continue to be taken in the planning and construction of these projects to ensure that impacts on water quality and riparian vegetation from construction and use are minimal. Examples of these measures include:

- Use of existing disturbed areas (e.g., pre-existing water access points for water landings and abandoned rail beds for trails) and preservation of existing natural vegetation
- Erosion control measures during construction
- Revegetation and other stabilization measures to limit erosion and sedimentation as a result of use
- Stormwater control measures such as detention basins
- Establishment of stabilized vehicle access and parking areas to prevent impacts from vehicles on streambanks and riparian vegetation

Trails will be surfaced and clearly delineated so as to minimize the potential for users to leave the trail and impact sensitive streambank vegetation. The scale of the water landings will promote use of non-motorized and small motorized craft, minimizing the potential for impacts from pollutants such as oil and grease.

Measures currently used to protect water resources from construction and use impacts associated with the Schuylkill River Trail System will continue to be used for all alternatives.
B. Alternative B: Places

Alternative B will direct more resources and partnerships towards the preservation and restoration of water resources than the No Action Alternative (Alternative A). However, since it focuses on places where clusters of heritage resources are located and the preservation of historic resources, it will not have as great a positive impact on the preservation and enhancement of water resources throughout the heritage area as will Alternatives C and D.

The positive impacts of this alternative are likely to be the preservation and targeted restoration of some wetlands, floodplains, high quality streams, and scenic rivers near the main stem of the Schuylkill River where most heritage resource clusters are located. Many of these targeted restoration activities are likely to take place along with the redevelopment of traditional activity centers and the enhancement of associated waterfront parks. Water resources along the main tributaries could also be preserved as several potential clusters of heritage resources are located within tributary watersheds.

The development of boat landings and segments of trails could have physical impacts on water resources. These impacts are likely to be minimal due to the limited focus of this alternative on the enhancement of recreational resources and the limited geographic area it is expected to affect. In addition the following measures will continue to be taken to mitigate these impacts:

- Boat landings and trails will be developed in existing disturbed areas (e.g., pre-existing water access points and abandoned rail beds) in order to preserve existing natural vegetation.
- Erosion control measures will be implemented during construction.
- Revegetation and other stabilization measures will limit erosion and sedimentation.
- Detention basins and other stormwater control measures will reduce runoff from trails and boat landings.
- Establishment of stabilized vehicle access and parking areas will prevent impacts from vehicles on streambanks and riparian vegetation.

Development of historic sites (Strategy 1A), promotion of entrepreneurial activity (Strategy 4B), and marketing of historic centers (Strategies 1A, 4A, and 5A) will likely result in increased visitation and associated development in traditional centers. Because most of the heritage area’s traditional centers are located along the Schuylkill River or one of the major tributaries, such development could potentially affect water quality and water resources. However, the types of development encouraged under Alternative B will be concentrated in established
developed areas and will involve use or redevelopment of existing buildings and parking areas. Thus any impacts to water resources resulting from the quantity and quality of stormwater runoff will be negligible compared to existing conditions.

C. Alternative C: Experiences

Alternative C emphasizes area-wide strategies, resources, and linkages related to experiential topics. This alternative will likely have a greater impact on the preservation and enhancement of water resources than Alternatives A and B. Alternative C will leverage more resources and partnerships and emphasize water resource issues more than Alternative A, which does not have a significant natural resource focus. Alternative C will also likely have a more positive impact on water resources than Alternative B. While Alternative B emphasizes preservation of heritage resources in specific places, Alternative C is directed more towards preserving and promoting regional linkages and topics of special interest to visitors. Because the Schuylkill River, its tributaries, and other water resources within its watershed are important regional linkages, Alternative C is more likely to positively impact entire aquatic systems within the heritage area, instead of aquatic resources near clusters of heritage resources as in Alternative B. For example, because most high quality streams are located outside of potential heritage resource clusters, Alternative C has the potential to positively impact more miles of high quality streams through preservation and restoration activities than Alternative B. Similarly, more scenic stream miles have the potential to be preserved and enhanced under Alternative C than Alternative B.

Potential types of positive impacts include streambank restoration, water quality improvement projects, riparian area conservation, and water quality monitoring. The development of a regional greenway strategy (Strategy 1B) will provide buffers along heritage area water resources and reduce flow and quality of stormwater runoff. The development of regional partnerships (Strategy 2B) will foster coordination among restoration activities. This alternative is also likely to raise public consciousness of water quality and riparian preservation issues due to its regional and environmental focus. In addition, the implementation of a water quality monitoring program (Strategy 1B) will aid in creating a baseline for future water quality surveys and can be used to target areas for enhancement or restoration. Alternative C is likely to result in the development of additional boat landings and more trail connections to the Schuylkill River Trail than will be developed under Alternatives A and B. Impacts to water resources from these actions will be mitigated by measures similar to those discussed in Alternatives A and B. These include the use and stabilization of existing disturbed areas, erosion and stormwater control techniques, revegetation, and established vehicle access areas.
Development of regional thematic connections (Strategies 2B and 5B), enhancement of recreational resources (Strategies 3A and 3B), and conservation and restoration of natural resources (Strategy 1B) will likely result in increased visitation throughout the heritage area. However, visitation increases are projected to be smaller than the other action alternatives. In addition, associated heritage tourism development is likely to be minimal and spread throughout the heritage area. Development will also be encouraged to use existing infrastructure and buildings. Project evaluation criteria will minimize the impacts of secondary development. Therefore, any impacts to water resources associated with increased stormwater runoff from development are expected to be minimal.

D. Alternative D: Layers

Alternative D is likely to have the greatest impact on preservation and enhancement of water resources throughout the heritage area. It will likely leverage the most resources and partnerships of all of the alternatives. In addition, addressing both clusters of heritage resources and area-wide linkages will impact water resources in both established centers of heritage activity and throughout the heritage area. Water resources near traditional centers along the Schuylkill River and its main tributaries are likely to be enhanced through place-based water quality restoration activities. Water resources in more rural parts of the heritage area are also likely to be preserved and restored. This alternative is more likely to impact high quality streams and scenic rivers than either Alternatives A and B and is expected to have at least as positive an impact on these resources as Alternative C. Alternative D has the potential to positively impact the most stream miles and wetland acreage of all of the alternatives.

Potential positive impacts include wetland and streambank restoration, aquatic habitat enhancement, partnerships among watershed organizations, and a regional water quality monitoring program. The effects of a water quality monitoring program in this alternative are similar to those in Alternative C. However, it is likely to more extensively cover the heritage area’s waterways, providing future researchers with a baseline of water quality data to measure the progress of water quality improvement initiatives and to provide guidance on areas to target for restoration.

Alternative D is likely to result in the establishment of more boat landings and segments of the Schuylkill River and tributary trails than the other alternatives. As a result, there is the potential for these actions to impact water resources. A number of measures will continue to be implemented to ensure that these impacts are minimal. Currently used for similar projects for the Schuylkill Heritage Corridor under the
Pennsylvania Heritage Parks program, these mitigation measures are similar to those discussed in the previous alternatives. They include use of existing disturbed areas to preserve riparian vegetation, erosion and stormwater control measures, revegetation and stabilization of trail sides and streambanks, and establishment of vehicle access areas for trailheads and boat landings. Trails will also be clearly marked to minimize the potential for trailside impacts. Boat landings will be sized to accommodate non-motorized and smaller motorized craft, minimizing the potential for impacts from oil and grease. This alternative’s focus on revitalizing traditional centers (Strategies 4A and 4B), restoring and enhancing historic sites (Strategy 1A), providing regional connections (Strategies 2B and 5B), and developing recreational resources (Strategies 3A and 3B) is projected to result in more visitation to the heritage area than the other plan alternatives. Revitalization of traditional centers, marketing of recreational resources, and increased visitation is likely to promote the development of additional heritage tourist businesses. This development will be encouraged to locate in established areas using existing infrastructure and buildings. In addition, the project evaluation process specified in Section 2.2.2 of the Plan will be used to minimize the possibility that projects will exceed natural carrying capacity or generate undesirable secondary development. As a result, impacts on water resources from the quality and quantity of stormwater runoff will be minor.

4.2.2 Air Quality and Noise Impacts

A. Alternative A: No Action

Because Alternative A will continue current levels of resources and partnerships under the Pennsylvania Heritage Parks program, it is expected to result in the smallest visitation increase of the four alternatives. Therefore, potential adverse impacts to air quality caused by persons travelling by automobile to access heritage resources and attractions are likely to be minimal. Noise increases are also likely to be minimal. Potential impacts include a slight increase in noise, traffic, and airborne pollutants from automobiles near established heritage resource sites and access points to the Schuylkill River Trail and the Schuylkill River Water Trail. This alternative’s focus on the development of the Schuylkill River Trail will help to mitigate these impacts by causing a minor reduction in the number of automobile trips with accompanying air quality improvements.

B. Alternative B: Places

Alternative B is likely to have little impact on air quality and noise levels in the heritage area. This alternative’s focus on preserving and enhancing historical and cultural sites in heritage resource clusters (Strategy 1A),
stimulating economic and entrepreneurial activity in traditional activity centers (Strategy 4B), and marketing the heritage area to heritage tourists (Strategy 5A) is likely to cause minor increases in visitation and vehicular activity in the heritage area. Traditional activity centers and areas where heritage resources are clustered are most likely to be affected. Potential impacts such as slight increases in noise and air pollution from vehicular use and noise due to increased vitality of traditional centers will be offset by measures such as:

- Development of segments of the Schuylkill River Trail to connect heritage resources
- Development of walking tours to reduce automobile usage in downtown districts
- Preservation of green space in the vicinity of heritage resource clusters

Potential impacts associated with the rehabilitation of historic and cultural resources and the development of tourist infrastructure include increased noise and dust. However, these impacts will be temporary, localized, and minimal as major construction operations are not expected to result from this alternative.

C. Alternative C: Experiences

Like Alternative B, Alternative C is likely to have little effect on air quality and noise levels in the heritage area. This alternative’s focus on the development of regional thematic linkages, regional historic sites, and recreational opportunities is projected to result in the smallest increase in visitation and resulting vehicular use of the three action alternatives. In addition, visitation will be distributed more widely throughout the heritage area than in Alternative B. Therefore, potential air quality and noise impacts will likely affect a larger area but will be even less significant than in Alternative B. Rural areas outside of village centers will likely experience somewhat greater impacts of vehicular use due to the alternative’s focus on visitor experiences that are dispersed throughout the heritage area.

A number of Plan strategies will help to mitigate the effects of increased vehicular use and visitation. The development of the Schuylkill River Trail and the Schuylkill River Water Trail (Strategy 3A) will provide an alternative to driving to or between heritage resource sites. The development of a regional greenway strategy (Strategy 1B) will help to mitigate increased vehicular use and potential secondary development. The development of additional recreational resources (Strategy 3B) will decrease the distance some heritage area residents will have to travel to access recreational opportunities. Revitalization of urban centers (Strategies 4A and 4B) will promote development patterns
that favor pedestrian and transit as opposed to automobile-dependent suburban development.

Additional types of impacts that could occur include increased noise and dust associated with the development or rehabilitation of historic sites, recreational resources, and gateway facilities. However, these projects will be dispersed throughout the heritage area. In addition, these impacts will be temporary, localized, and minimal as major construction operations are not expected to result from this alternative.

D. Alternative D: Layers

Alternative D has the highest projected increase in visitation and thus has greater potential than the three previous alternatives to impact air quality and noise levels. Strategies to revitalize traditional activity centers (Strategies 4A and 4B) and rehabilitate historic sites (Strategy 1A) will likely increase visitation to downtown commercial and historic districts. In addition, actions that provide regional linkages via the development of land trails (Strategies 3A and 3B), driving tours (Strategy 5B), gateway facilities (Strategy 5B), and additional recreational opportunities (Strategy 3B) will increase visitation and vehicular activity to more rural parts of the heritage area.

The Management Plan incorporates a number of measures to minimize the impacts of increased visitation and vehicular use on air quality. In addition, several actions of the plan will help to improve air quality in the heritage area. The development of the Schuylkill River Trail, tributary trails, and the Schuylkill River Water Trail (Strategy 3A) will reduce dependency on vehicles for access to and between heritage sites. The development of walking tours (Strategy 5B) for historic and commercial districts will make sites more accessible for pedestrians, reducing traffic and vehicle emissions in downtown areas. The development of a regional greenway strategy (Strategy 1B), revitalization of traditional centers (Strategies 4A and 4B), and use of existing infrastructure for heritage tourism related businesses will preserve open space, reduce “sprawl” development, and contribute to maintaining air quality in rural areas.

Some minor temporary impacts may occur during the development of trails, recreational resources, gateway facilities, and rehabilitation of heritage sites. These impacts include increased noise and dust in localized areas and will be mitigated by preserving existing vegetation and quickly stabilizing affected areas.
4.2.3 Impacts on Land Resources

A. Alternative A: No Action

Because of its limited geographic extent, programmatic scope, and limited resource levels, the present Heritage Parks program does not focus on protecting and enhancing land resources in the Schuylkill River Valley. Therefore, Alternative A will have the least positive impact on the protection of species, habitat, and important natural areas. This alternative will also likely have the fewest impacts on land resources resulting from increased visitation. Land resources are most likely to be impacted in areas where the Schuylkill River Trail is being developed. Several measures will continue to be implemented to ensure that these impacts are minimized. These include:

- Preservation of existing vegetation and removal of invasive species
- Revegetation and grading to reduce soil erosion
- Stabilization of abandoned railroad embankments to prevent erosion
- Establishment of parking areas near trailheads and boat landings to prevent impacts from vehicles
- Clear delineation of trails to deter users from leaving the trail and impacting habitat

This alternative is not likely to result in secondary development that would consume farmland, open space, habitat, or natural areas.

B. Alternative B: Places

Alternative B will likely have a greater positive impact on the preservation and enhancement of land resources in the heritage area than Alternative A, but is unlikely to have as significant an impact as Alternatives C and D. This alternative will have its greatest impact near heritage resource centers and along the main stem of the Schuylkill River and its major tributaries.

Alternative B will likely result in preservation of habitat, farmland, and open space around traditional activity centers to contribute to making more attractive destinations. In addition, use of existing infrastructure and revitalization of abandoned buildings for new business activities (Strategies 4A and 4B) will ensure that rural lands and lands on the suburban fringe are not converted for development. The Plan also recommends protecting existing green space around heritage resource sites. Other potential impacts include the acquisition of access rights to land for the completion of segments of the Schuylkill River Trail and the Schuylkill River Water Trail. Watershed conservation plans focusing on areas near heritage clusters will promote additional action to protect land resources.
resources in activity centers. However, these plans are not likely to be as effective in protecting land resources as watershed conservation plans developed under Alternatives C and D because of the greater geographic coverage of those alternatives.

Under Alternative B, land resources could potentially be impacted in areas where segments of the Schuylkill River Trail and/or boat landings for the Schuylkill River Water Trail are developed. These impacts are likely to be minimal due to this alternative's focus on preservation and enhancement of historic resources and heritage resource clusters instead of recreational resources. In addition, these impacts will be minimized by a continuation of the following control measures:

- Boat landings will be developed in existing parks or disturbed areas so that vegetation and modification of the riparian area is minimal
- Trails will be located along previously disturbed areas such as abandoned railroad beds
- Existing vegetation will be preserved and invasive species will be removed
- Sites will be graded and revegetated to reduce soil erosion
- Clearly delineated trails and parking areas will reduce impacts on habitat due to users leaving the trail

Alternative B could result in additional impacts to land resources due to its focus on the revitalization and increased economic vitality of traditional centers and heritage resource clusters. These strategies are likely to increase visitation to downtown commercial and historic districts. They are also likely to have a resultant increase in development of businesses that serve heritage tourism. Measures to address potential impacts to land resources as a result of increased economic activity in traditional centers include the reuse of abandoned buildings and use of existing infrastructure (Strategies 4A and 4B). In addition, the project evaluation process specified in Section 2.2.2 will minimize the possibility that projects will generate undesirable secondary development.

C. Alternative C: Experiences

Alternative C is likely to have a greater impact on the preservation of habitat, farmland, and species than Alternatives A and B. This alternative's emphasis on regional thematic linkages will contribute to protecting land resources that comprise regional systems, such as habitat, farmland, and open space. This regional focus makes it likely that more acreage of land resources will be protected and more watershed conservation plans will be developed than in Alternative B. Watersheds

Impacts to land resources resulting from development of the Schuylkill River Trail will be minimized through the continuation of proven control measures during design and construction.
in the heritage area that help to link heritage resources and topics are the most likely candidates for the development of conservation plans.

Alternative C is likely to preserve habitat, open space, and farmland in the heritage area through a number of actions. The development of a regional greenway strategy (Strategy 1B) will preserve important habitat and reduce the threat and impacts of “sprawl” development. In addition, it will provide opportunities to restore native habitat and remove invasive species. The establishment of a network of birding areas (Strategy 1B) will protect important migratory flyways and potential bird habitat. Restoration of the de-silting basins will create additional bird habitat (Strategy 1B). Protection of regionally significant open space areas, such as large intact agricultural tracts, will preserve habitat and heritage area character.

Impacts associated with the development of the Schuylkill River Trail, tributary trails, connection trails, and boat landings for the Schuylkill River Water Trail are likely to be slightly greater than in Alternatives A and B due to the alternative’s focus on the regional linkages and increased recreational opportunities. Impacts due to the development of these resources will be mitigated through a continuation of similar measures mentioned in Alternatives A and B. They include the use of existing and previously disturbed sites, preservation of existing vegetation and habitat, grading and revegetation to stabilize and prevent soil erosion, and establishment of clearly marked trails and parking areas to prevent disturbance of habitat. The effects of increased visitation and related increases in heritage tourism business development associated with this alternative are likely to be minimal. Because of its regional focus there is somewhat greater potential for impacts on land resources in more rural areas than in Alternative B. However, visitation is estimated to increase the least of the three action alternatives and will be distributed throughout the heritage area rather than concentrated in specific places as in Alternative B. In addition, the emphasis of Plan strategies on use of existing infrastructure and buildings for heritage tourism related businesses will reduce the need for new development and conversion of open space.

D. Alternative D: Layers

Alternative D is the alternative most likely to preserve, enhance, and restore habitat areas and other sensitive land resources in the heritage area. This alternative’s focus on preserving green space associated with heritage resource sites; developing a regional greenway strategy, restoring de-silting basins, and establishing a network of birding areas (Strategy 1B); and revitalizing traditional centers (Strategies 4A and 4B) will protect and enhance land resources within heritage resource clusters as well as in more rural parts of the heritage area. In addition,
this alternative is likely to leverage more resources and partnerships than the other alternatives and, as a result, direct the most efforts towards preservation of significant natural/habitat areas. Important land resources outside of the heritage resource clusters that are potentially affected by this alternative include public gamelands, forests, and parks; privately owned habitat areas; the de-silting basins; and riparian and stream buffers. Land resources and habitat along the Schuylkill River and its main tributaries in the vicinity of heritage resource clusters are also likely to be positively impacted by this alternative. In addition, Alternative D is likely to result in development of the greatest number of watershed conservation plans due to its focus on both regional resources and heritage area clusters. Watershed areas located near population centers that support concentrations of heritage resources and create regional linkages will most likely be affected.

This alternative is also likely to result in the greatest amount of trail and boat landing development due to its focus on creating regional linkages, developing recreational resources, and incorporating heritage sites into trail networks. Impacts to land resources resulting from the development of the Schuylkill River Water Trail, Schuylkill River Trail, and tributary and connecting trails will be minimized by a continuation of the following practices:

• Boat landings will be developed in existing parks or disturbed areas so that disturbance to existing vegetation and modifications to land resources are minimal.

• Trails will be located along previously disturbed areas such as abandoned railroad beds.

• Existing vegetation will be preserved and invasive species will be removed.

• Sites will be graded and revegetated or otherwise stabilized to reduce soil erosion.

• Clearly delineated trails and parking areas will reduce impacts on habitat due to users leaving the trail.

Because Alternative D is projected to result in the greatest increase in visitation of the three action alternatives, use-related impacts to land resources are potentially the highest among all the alternatives, but will still likely be minimal. The evaluation criteria will help ensure that heritage projects do not stress natural resources beyond their carrying capacity. The plan strategies and criteria will also help ensure that heritage area projects make use of existing infrastructure, thus limiting impacts to land resources by new development.

However, some minor impacts due to use by the increased number of visitors at local sites may be inevitable. Impacts to land resources, such
as erosion and trampling of vegetation, are most likely to be experienced along trails, parking areas, and public areas near natural and recreational attractions. As noted, measures will continue to be taken during construction of the Schuylkill River Trail and connecting trails that will have a positive impact on land resources through the stabilization of abandoned railroad embankments to prevent erosion, removal of invasive vegetation, and the replanting of areas disturbed during construction. Land resources in heritage resource centers could be affected by increased economic vitality and more demand for parking, but the plan strategies and project evaluation criteria will help to mitigate the effects of these impacts. Some new development may occur in areas that are revitalized as a result of Management Plan strategies. However, most of this development will be concentrated in existing developed areas.

4.3 IMPACTS ON HISTORIC AND CULTURAL RESOURCES

This section discusses the potential impacts of the alternatives on the following cultural and historic resources:

• Archeological resources
• Historic resources
• Scenic roads

Included are the potential positive impacts that will result from identifying, preserving, and enhancing cultural resources, as well as the potential effects on these resources resulting from increased visitation. However, it is likely that any adverse effects that could result from increased use and visitation will be outweighed by the increased impetus for preservation created by heightened awareness of the significance of cultural resources among citizens, community leaders, and preservation groups.

4.3.1 Alternative A: No Action

Alternative A will likely have the least impact on the identification, preservation, and enhancement of historic and archeological resources in the heritage area. This alternative will commit the least amount of resources and partnerships towards cultural resource preservation. Cultural resources most affected by this alternative are likely to be in communities along the Schuylkill River. The Pennsylvania Heritage Parks program has had an impact on the development or nomination of three historic districts plus an additional one currently in progress within the Schuylkill Heritage Corridor since its inception. This rate is less than would be likely under the action alternatives. It is possible that
this alternative will result in the enhancement of cultural resources in existing historic districts.

Under Alternative A, visitation and use of historic sites is projected to show modest increases. Therefore, this alternative will have the least amount of impact on cultural resources due to visitation and use. Potential impacts due to increased visitation include increased maintenance costs, increased need for and cost of staffing cultural sites, and increased potential for sensitive sites to be damaged by visitors. Any potential impacts are likely to be greatest in communities along the main stem of the Schuylkill River and at major cultural sites such as Valley Forge National Historical Park and Hopewell Furnace, where current enhancement and marketing efforts are focused. However, any increased use of these sites is unlikely to significantly impact their condition and historic integrity. In addition, the benefits of preserving cultural sites outweigh any potential impacts due to visitation.

4.3.2 Alternative B: Places

Alternative B will likely have a significant positive impact on the identification, preservation, and enhancement of cultural resources in the heritage area. This alternative will focus on designated places or clusters of cultural resources where visitor infrastructure is currently available or easily developed. The areas that are most likely to be affected are historic communities along the Schuylkill River and its major tributaries, where a majority of the established cultural sites are located. By creating local linkages among historic sites, building on existing linkages, coordinating preservation efforts, encouraging voluntary stewardship, and promoting awareness of sites among local residents (Strategy 1A) this alternative will have multiple benefits for cultural sites in the heritage area, including:

- Increased awareness of existing cultural sites among residents
- Increased awareness of potential cultural sites among preservation professionals
- Increased appreciation and preservation of historic resources at major cultural sites, such as Valley Forge National Historical Park and Hopewell Furnace National Historic Site, that are located in heritage resource clusters
- Improved preservation techniques among historic preservation professionals

Encouraging partnerships among heritage resources within designated clusters could also result in coordinated marketing of existing sites and pooling of operating staff. These actions will likely increase the number of identified cultural sites in the heritage area and make them more
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accessible to the public. Identification and preservation of established and newly recognized (emerging) sites could also lead to more historic designations, further preserving and enhancing these sites. Towns and cultural areas along the river that do not have historic districts, such as the Mahanoy Valley, Hamburg, Perkiomen Valley, Conshohocken, and parts of Philadelphia, could eventually receive historic district designation through local action. This alternative will also help to further preserve and enhance cultural resources in existing historic districts, such as in Tamaqua, Pottsville, Reading, the Oley Valley, Pottstown, Phoenixville, and Norristown.

The Plan specifically mentions working to protect the St. Nicholas Coal Breaker (Strategy 1A). Located near Mahanoy City, development of the St. Nicholas Coal Breaker as a historic destination could provide an anchor for a potential historic district in the Mahanoy Valley. It could also provide a model for historic preservation in Schuylkill County where much of the region’s coal mining heritage is located.

This alternative will also likely positively impact the identification and preservation of scenic roads in the heritage area. Many roads with scenic qualities (e.g., views of the Schuylkill River, tributary streams, or historic towns) traverse areas where heritage resources are clustered. Specifically, Routes 23, 100, 61, 209, and several roads in Philadelphia could be affected.

Increased visitation to heritage resource clusters could also have potential impacts on cultural resources. Increased visitation could result in increased maintenance costs to address use impacts at specific sites. However, several measures in the Plan will minimize the potential for impacts to cultural sites. The Management Plan evaluation criteria for cultural site enhancement projects call for adequate infrastructure to be in place and for carrying capacity not to be exceeded. In addition, it is likely that increased visitation will help generate more interest and resources to help preserve and maintain sites that could otherwise be degraded by use or neglect.

Increased visitation to the heritage area could also affect scenic roads. Scenic roads near heritage resource clusters could experience more traffic and increased development. However, the conservation of cultural resources along scenic roads is likely to help maintain scenic character. In addition, the plan strategies and evaluation criteria call for economic activity and associated development to occur in areas where infrastructure is already in place, thus reducing the potential for impacts on scenic roads. The project evaluation criteria will also minimize the possibility that heritage projects will generate unintended secondary development along scenic roads.
4.3.3 Alternative C: Experiences

Alternative C will likely have a significant positive effect on the identification, preservation, and enhancement of cultural resources in the heritage area. However, it is not likely to identify and preserve as many cultural sites as Alternatives B and D. In addition, it will have a different focus on the preservation of cultural resources than both of those alternatives. Alternative C will direct resources and partnerships towards the identification and preservation of sites associated with visitor experience topics. Strategies emphasized under this alternative include preservation of regional scale resources (Strategy 5A), establishment of interpretive linkages (Strategy 5B), and development of physical linkages to promote heritage tourism and use of cultural sites (Strategies 2B and 5B). These strategies will result in increased appreciation and enhancement of regionally significant cultural resources, such as Valley Forge National Historical Park and Hopewell Furnace National Historic Site. In addition, this alternative's focus on the enhancement of recreational resources could result in increased visitation to related historic resources in these and other parks that contain both cultural and recreational attractions. However, it might not be as successful in protecting smaller, lesser known historic sites in traditional centers because they do not provide a major thematic link.

Potential linkages among sites include streams, trails, scenic roads, and examples of area-wide heritage such as the historic coal industry in Schuylkill County. Alternative C is likely to have its greatest impact on the preservation and enhancement of scenic roads. Many of the heritage area's roads with scenic characteristics are located in more rural areas. In addition, scenic roads can provide the type of regional linkage among resources promoted by this alternative. This alternative is also likely to emphasize the development of partnerships with nearby heritage areas. Providing linkages to other heritage areas will increase awareness of cultural sites and increase the marketing base for cultural attractions in the Schuylkill River Valley.

The Management Plan recommends working with the St. Nicholas Coal Breaker property owner to develop a feasibility study and plan for the future use of the site (Strategy 1A). Development of the St. Nicholas Coal Breaker in northern Schuylkill County as a cultural destination could be the basis for the establishment of a coal heritage thematic link. It could provide visitors with a prime example of coal heritage in the Schuylkill River Valley and be a link in driving tours, scenic roads, or trails. Lastly, it will likely bring more visitors to the northern part of the heritage area - potentially increasing visitation at nearby cultural sites.

Alternative C is not likely to affect the identification and preservation of as many cultural sites as Alternative B because the latter alternative
focuses more on geographic clusters or places where more cultural sites are likely to be located. However, Alternative C could be instrumental in identifying and preserving cultural sites that are located in less visited and more rural parts of the heritage area and are related to an area-wide topic. While these resources are fewer in number, they may be overlooked by typical cultural resource preservation efforts because they are not located in an historic center or district. This alternative will likely lead to the enhancement of fewer existing historic districts and designation of fewer new ones than Alternative B because many of the existing and potential historic districts are located where clusters of heritage resources are present.

The potential impacts of visitation and use on cultural resources are likely to be less in Alternative C than in Alternatives B and D because visitation to the heritage area is projected to be lower and more evenly distributed throughout the heritage area. Larger, well known regional cultural resources are likely to experience the greatest impacts. Several strategies in the Plan are aimed at reducing these potential impacts. Mitigation for increased visitation and use of well-known existing sites will help to preserve these sites as the heritage area's resources are marketed. The project evaluation criteria will minimize the potential for preservation, enhancement, and marketing of projects to increase visitation beyond carrying capacity.

Visitation could also affect scenic roads with increased traffic and economic development, especially in more rural areas. As noted, the plan strategies and evaluation criteria are designed to ensure that use of cultural sites and associated economic activity does not exceed carrying capacity or adversely affect cultural resources.

4.3.4 Alternative D: Layers

Alternative D is likely to have the greatest positive impact on the identification and preservation of cultural resources of all the alternatives. Strategies to encourage voluntary stewardship (Strategy 1A), coordinate preservation and marketing efforts and partner with neighboring heritage areas (Strategy 2A), create local and regional linkages among cultural sites (Strategy 2B), and provide walking and driving tours (Strategy 5B) will increase awareness of cultural resources and destinations. This alternative will direct resources and partnerships both towards communities where clusters of cultural resources are located and towards other regional cultural resources that relate to visitor experience topics. It will likely affect cultural resources in historic communities along the Schuylkill River and its main tributaries as well as significant regional cultural resources located in more rural parts of the heritage area. It will result in the preservation of cultural resources and increased visitation at nationally significant sites in the heritage area.
area, including Valley Forge National Historical Park and Hopewell Furnace. It will create linkages among cultural and recreational sites, potentially increasing awareness of cultural tourism opportunities among recreational tourists. It will preserve and promote cultural resources in the greatest number of existing historic districts, such as those located in Pottsville, Reading, Pottstown, Phoenixville, and Philadelphia, as well as outlying areas. It will also likely foster the designation of more new historic districts than the other alternatives. Candidates for historic district designation include eligible resources located both in the primary heritage clusters and in areas located away from the primary clusters.

Projects such as the preservation and development of the St. Nicholas Coal Breaker (Strategy 1A) as a cultural site will provide an anchor for the development and marketing of heritage resources in northern Schuylkill County. It will also provide the basis for a coal heritage thematic linkage in the Mahanoy Valley and Schuylkill County. It will bring more heritage tourists to sites in the area and raise awareness of local historic sites among local residents. It could also provide the impetus for the preservation of additional cultural sites in the area or related to coal heritage. Similar projects in other parts of the heritage area will result in similar benefits.

Alternative D is projected to have the largest increase in visitation of all the action alternatives. It will attract more visitors to cultural sites, both in heritage resource clusters and in outlying parts of the heritage area. It will likely increase visitation at major cultural sites, such as Valley Forge National Historical Park and Hopewell Furnace National Historic Site. The increased visitation is likely to contribute to the preservation of cultural resources throughout the Schuylkill River Valley as it becomes known for its cultural tourism opportunities. However, the potential impacts of this alternative from visitation and use of cultural sites are the highest of the alternatives. Increased visitation could result in increased maintenance costs to address use impacts at specific sites. As noted, the Management Plan strategies and evaluation criteria are designed to ensure that infrastructure is in place to support increased use of cultural sites and that such use does not exceed carrying capacity. In addition, visitation from this alternative is likely to be distributed throughout the five county region of the heritage area. Moreover, the increased public recognition of cultural resources fostered by this alternative should result in increased availability of resources for site preservation and maintenance.

Under this alternative, scenic roads could experience effects due to increased traffic and secondary development. However, the plan strategies and evaluation criteria call for economic development to be directed towards areas where visitor infrastructure exists and roads are able to accommodate traffic. In addition, the preservation
and enhancement of cultural resources should increase the recognized scenic value and impetus for protection of roads that traverse cultural landscapes.

### 4.4 IMPACTS ON RECREATIONAL RESOURCES

This section discusses the potential positive impacts of the four alternatives on the identification, enhancement, preservation, creation, and marketing of outdoor recreational resources. Regionally significant recreational resources considered include:

- Lake, streams, and other water resources used for outdoor recreational purposes
- Urban, regional, state, and national parks
- Recreational trails
- Gamelands

This section also discusses the potential impacts associated with increased visitation and use of specific recreational sites.

#### 4.4.1 Alternative A: No Action

Alternative A will have the least impact on the preservation, creation, and enhancement of recreational resources in the heritage area. This alternative assumes that the current levels of resources and partnerships committed to preserving and enhancing recreational resources will continue. These efforts have had a positive impact on recreational resources through the staged development of the Schuylkill River Trail and enhancements to riverfront parks and boat landings as part of the development of the Schuylkill River Water Trail. A continuation of these efforts will continue to provide new recreational opportunities, but to a lesser degree than the three action alternatives.

Under this alternative, recreational sites along the Schuylkill River and the Schuylkill River Trail are likely to experience the greatest positive impacts in terms of preserving and enhancing recreational opportunities. However, the lower levels of resource commitment and partnerships associated with this alternative are likely to result in the enhancement of fewer existing recreational sites and the creation of fewer new ones than in the action alternatives. In addition, this alternative will commit the least resources towards completing the Schuylkill River Trail, a primary Management Plan strategy.

Impacts to recreational resources from visitation and use are likely to be minimal with this alternative. Visitation and use of recreational sites is likely to increase modestly over current levels. The Management Plan includes measures to reduce the impact of increased visitation.
at recreation sites. Project evaluation criteria will reduce the potential for recreational sites to be used beyond their carrying capacity. If a recreational site is used beyond its carrying capacity, damage to adjacent natural habitat and erosion of recreational resources could result. In addition, overcrowding in parking lots, at trailheads, and on trails could reduce visitor experience. However, none of these impacts are likely to be significant as a result of this alternative's focus on the development of the Schuylkill River Trail and the measures taken to mitigate these potential impacts during construction of the trail.

State and national parks and regional trails such as the Valley Forge-Philadelphia Trail will likely remain the primary focus of recreational activity and major draws for recreational visitors. Therefore, impacts due to use are likely to remain greatest at these sites, but will not be significantly increased as a result of National Heritage Area designation. Impacts due to use could increase in these areas if outdoor recreation becomes more popular in the heritage area and fewer sites are enhanced or created to accommodate part of the demand than in the action alternatives.

National Park Service properties or units within the Schuylkill River Valley National Heritage Area include Valley Forge National Historical Park, Hopewell Furnace National Historic Site, and the Appalachian Trail. The potential impacts of Alternative A on these properties have been reviewed and it has been determined that impairment will not occur.

4.4.2 Alternative B: Places

Alternative B is likely to have a greater impact on the preservation and enhancement of recreational resources in the heritage area than Alternative A, but less than Alternatives C and D. Alternative B will direct resources and partnerships towards preserving and enhancing recreational sites near heritage resource clusters, including resources that are most likely to be used by local residents and their visiting friends and relatives. Therefore, it will have its greatest impact in enhancing portions of the Schuylkill River and the Schuylkill River Trail located near communities containing clusters of heritage resources, as well as waterfront parks and other passive outdoor recreational resources located in the vicinity of these clusters. It will likely provide many heritage area residents with additional passive recreational opportunities as most residents live in or near the heritage resource clusters that are the focus of

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1 “Impairment” is an impact that in the professional judgement of the responsible National Park Service Manager would harm the integrity of park resources or values, including the opportunities that would otherwise be present for the enjoyment of those resources or values. Whether an impact meets this definition depends upon the particular resources or values that would be affected; the severity, duration, and timing of the impact; the direct or indirect effects of the impact; and the cumulative effects of the impact in question.
this alternative. Therefore, it could reduce travel times to recreation sites such as parks, trails, and waterfront areas for many heritage residents. In addition, it could result in the creation of more linkages among recreational and cultural sites in activity centers and link activity centers to regional recreational resources passing near downtown districts. For example, development of the Schuylkill River Trail in the Port Clinton heritage resource cluster area could link the Town and its heritage resources to the Appalachian Trail. This alternative’s focus on preserving and enhancing historic and cultural resources in heritage resource clusters could also result in the development of additional destinations located along portions of the Schuylkill River Trail. It could also result in the development of smaller recreation and open space areas that are associated and potentially preserved and enhanced with cultural sites.

Compared to the other action alternatives (C and D), Alternative B places less emphasis on increasing outdoor recreational opportunities in more rural parts of the heritage area, including larger regional resources located at a distance from heritage resource clusters. In addition, this alternative places less emphasis on developing parts of the Schuylkill River Trail located between heritage resource clusters than the other action alternatives. Therefore, this alternative will be less effective than these alternatives in fulfilling one of the important plan strategies, which is to complete the development of the Schuylkill River Trail. It will also be less effective in marketing the recreational resources of the heritage area to potential visitors form outside the heritage area as rural recreational resources tend to be larger and more attractive to recreational tourists.

Alternative B is projected to result in increased visitation within the heritage area compared to the No Action Alternative. Impacts on recreational sites associated with increased visitation and use are likely to be highest near established communities for the following reasons. First, this alternative is likely to create or enhance recreational sites near heritage resource clusters, including sections of the Schuylkill River Trail. Next, these parks and recreational sites will be located closest to a majority of the population. As these sites are enhanced, they will be used by a larger local population. Lastly, these parks are most likely to be used by friends and relatives of local residents who are a primary target market of this alternative. However, the Management Plan strategies and evaluation criteria are designed to ensure that infrastructure is in place to support increased use of recreational sites and that such use does not exceed carrying capacity. In addition, the development of recreational sites in activity centers and heritage resource clusters will provide additional resources to offset increased visitation to these areas as a result of the preservation, enhancement, and marketing of cultural sites. Therefore, potential impacts such as overcrowding at parking lots and overuse of recreational sites in any one park or trail are likely to be
minimized due to increased options within heritage resource clusters. It should also be noted that visitation increases and related impacts are expected to be most significant along the Schuylkill River Trail where measures will continue to be taken to ensure that recreational resources are not compromised. This alternative is likely to increase recreational activity at Valley Forge National Historical Park, Hopewell Furnace National Historic Site, and the Appalachian Trail, as each is located within or adjacent to a heritage resource cluster. However, these increases are not expected to significantly impact recreational resources.

The potential impacts of Alternative B on these National Park Service properties have been reviewed and it has been determined that impairment will not occur.

### 4.4.3 Alternative C: Experiences

Alternative C is likely to have a greater impact on the enhancement or creation of regionally significant outdoor recreational resources in the Schuylkill River Valley than Alternatives A and B. Alternative C will direct higher levels of resources and funding towards regional recreational sites and resources that create linkages among such sites. This alternative is directed towards residents and visitors with interests in particular heritage related topics, including outdoor recreation, and who would be more inclined to travel to experience these interests than the more casual residents and visiting friends and relatives who are the primary target of Alternative B.

Alternative C is more likely than the other alternatives to address areas where regional recreational sites are lacking or where connections are needed between existing sites. Completion of the Schuylkill River Trail and other trails that link significant heritage resources will be a primary focus of this alternative. Waterfront parks along the Schuylkill River and its major tributaries are likely to be enhanced where they relate to this system of regional connections. Open space lands located along the Appalachian Trail, regionally significant state and national parks or gamelands, and recreational resources catering to specific interests are also likely candidates for preservation or enhancement.

This alternative will likely be effective in developing and linking regional recreational resources that also have cultural value. Plan recommendations include preserving and enhancing the de-silting basins as cultural, natural and recreational resources that could be linked to other heritage sites (Strategy 1B). Remaining pieces of the Schuylkill Navigation Canal could be preserved and enhanced as cultural and recreational sites linked to the Schuylkill River Trail (Strategy 3A). This alternative is more likely to result in the establishment of regional birding connections and the protection of birding resources. Hawk Mountain and Mill Grove, regional birding attractions that are...
located far from each other, could be linked through trails, designated auto routes, and/or interpretive materials. The regional focus of this alternative is more likely to result in the protection and promotion of migratory flyways and their incorporation into a birding trail or interpretive linkage. It could also enhance major regional trails such as the Horseshoe Trail, Schuylkill River Trail, and the Appalachian Trail and contribute to the promotion of Valley Forge National Historical Park as both a regional cultural and recreational site.

This alternative is also likely to enhance recreational opportunities through preservation of associated natural resources and features (Strategy 3B). Water quality improvements and monitoring (Strategy 1B) will result in an improvement of heritage area fisheries. Preservation of open space and creation of a regional greenway (Strategy 1B) will enhance related parks and trails. Preservation of regionally significant natural features will draw recreational tourists and provide major destinations along trails.

This alternative will have less effect on local recreational resources located near population centers. Such resources are unlikely to attract visitors with a special interest in certain types of recreational activities. In addition, these parks typically are not located along regional linkages. Local parks along major waterways will be an exception because waterways provide linkages between regionally significant resources.

Alternative C is projected to attract more visitors to the heritage area than Alternative A, but less than Alternatives B and D. Impacts from visitation and use could affect more recreational resources than Alternative B, but the impacts are likely to be less apparent in resources located near population centers and heritage resource clusters. In addition, outdoor recreational visitation will be distributed more evenly throughout the heritage area. State, national, and regional parks and trails are likely to experience the greatest impact due to increases in visitation for special interest recreational activities. Parks and gamelands located along major trails such as the Schuylkill River Trail and the Appalachian Trail will also be potentially subject to impacts from increased use. However, the large scale of these resources will minimize the potential for significant impacts such as overcrowding, trail erosion, and habitat disturbance in any particular location. In addition, the Management Plan evaluation criteria require that projects to enhance existing or create new recreational resources be reviewed to ensure that increased use and visitation does not exceed carrying capacity. This alternative’s focus on the preservation and enhancement of open space lands and important natural features is likely to result in habitat preservation near recreational resources and have a much greater positive impact on their preservation than the potential minor habitat disturbances associated with use.
This alternative is likely to increase recreational activity at Valley Forge National Historical Park, Hopewell Furnace National Historic Site, and the Appalachian Trail, as each would relate to a major thematic linkage. As with Alternative B, the levels of use associated with these increases are not expected to significantly impact recreational resources. In addition, this alternative is likely to increase awareness of cultural resources at these sites among recreational users.

The potential impacts of Alternative C on these National Park Service properties have been reviewed and it has been determined that impairment will not occur.

4.4.4 Alternative D: Layers

Alternative D will have the greatest impact of all the alternatives on the enhancement of existing recreational sites and creation of new ones in the Schuylkill River Valley. Alternative D will direct resources and partnerships towards recreational resources located near heritage resource clusters, regionally significant recreational resources that are not located near such clusters, and towards connections among these resources. This alternative will target both casual users (i.e., local residents and persons visiting friends and family) and visitors from inside and outside the heritage area with specific outdoor recreation interests.

Alternative D will enhance and create recreational resources near population centers and heritage resource clusters that are more likely to be visited by casual users. It will also address regional recreational sites that are likely to attract visitors with a special interest in certain types of outdoor recreation. Waterfront parks and sites offering outdoor recreational opportunities along the Schuylkill River and its major tributaries will likely be affected, as these resources are located along regional linkages and often within heritage resource clusters. State and national parks are also likely to be affected as they offer recreational opportunities to both the casual user and the visitors with more specialized recreational interests. State gamelands could be enhanced as well, as hunters are usually willing to travel further distances than the casual visitor and many of the state gamelands are located along regional connections. Recreational opportunities on the Schuylkill River and its main tributaries are likely to increase, as these waterways are regional recreational resources and linkages.

Implementation of this alternative could result in the incorporation of remaining vestiges of the Schuylkill Navigation Canal into the Schuylkill River Trail or Schuylkill River Water Trail. It could create additional recreational opportunities for birders through the preservation of migratory flyways and development of a birding trail linking regionally significant sites, such as Mill Grove and Hawk Mountain (Strategy
1B). It could lead to the enhancement of the de-silting basins and their incorporation into the network of heritage resources with both a cultural and recreational focus (Strategy 1B). Additional recreational opportunities could also be created through the provision of limited recreational access to previously restricted areas (Strategy 3B). This alternative is best suited to provide linkages among sites that have both recreational and cultural tourism opportunities such as Valley Forge National Historical Park. Lastly, urban parks could be enhanced, especially if they are located within one of the heritage resource clusters.

Similar to Alternative C, completion of the Schuylkill River Trail and other trails that create linkages among significant heritage resources will be a primary focus of this alternative. Through this alternative, the Schuylkill River Trail, tributary trails, and the Appalachian Trail are likely to become major connections among heritage resource clusters, regional recreational resources, and other sites that appeal to outdoor recreation interests.

There are few types of recreational resources that are not potentially affected by this alternative. Local parks in more rural parts of the heritage area are not probable candidates for enhancement because they are not located within a heritage resource cluster and are unlikely to attract visitors interested in recreational tourism. The recreational resource value of smaller tributaries in the heritage area may also not be affected because they do not provide regional linkages. An exception may be smaller trout streams that are well known within and outside the heritage area.

Alternative D is projected to attract the most visitors of the alternatives. Potential impacts from visitation and will most likely be experienced at state and national parks that have the greatest draw. The Schuylkill River Trail is also expected to experience significant increases in visitation as its development and promotion is a priority of this Management Plan. However, physical impacts to the trail and its surroundings will be minimal as it is being developed to accommodate high levels of use. Regional recreational sites and trails (e.g., the Appalachian Trail), tributary trails, and waterfront parks in heritage resource clusters will also likely experience slight impacts due to increased visitation and use. Any impacts from recreational use are likely to be minor because visitation will be spread throughout the five-county region of the heritage area. In addition, the criteria for evaluating heritage area projects will help ensure that the effects of use and visitation do not exceed the carrying capacity of recreational resources. The development of recreational resources within heritage resource clusters and at regionally significant parks and trails will also provide options for both heritage area visitors and local residents, reducing impacts at any one site. Preservation of open space lands (Strategy 1C), water quality...
improvements (Strategy 1B), preservation of green space near heritage resource sites (Strategy 1C), and development of a regional greenway strategy (Strategy 1B) will result in the protection of resources associated with recreational opportunities. These measures will have a positive impact on the preservation of natural areas and will more than offset any minor habitat disturbances associated with use.

This alternative will likely increase awareness of recreational opportunities at Valley Forge National Historical Park and Hopewell Furnace National Historic Site as both are within heritage resource clusters and provide a major regional thematic connection. Increased awareness of recreational opportunities and their incorporation into recreational linkages could also result in increased awareness, visitation, and protection of their cultural resources. As with Alternatives B and C, these parks and the Appalachian Trail are expected to experience increased visitation and use, but the levels of use associated with these increases are not expected to significantly impact recreational resources.

The potential impacts of Alternative D on these National Park Service properties within the heritage area have been reviewed and it has been determined that impairment will not occur.

### 4.5 IMPACTS ON LAND USE

This section describes the impacts each alternative will have on land use within the heritage area. For discussion purposes, land use is divided into three general categories:

- Damaged landscapes include abandoned mines and areas affected by mining, abandoned industrial parks and buildings, and other areas affected by obsolescent industrial activities.
- Rural landscapes contain a predominance of farmland, forests, old fields, and/or other forms of open space.
- Developed and developing landscapes include traditional centers such as cities, boroughs, villages, and the suburban or suburbanizing areas surrounding them.

#### 4.5.1 Impacts on Damaged Landscapes

**A. Alternative A: No Action**

Alternative A will likely have the least positive impact on the restoration and redevelopment of damaged landscapes in the Schuylkill River Valley of the four alternatives. The Pennsylvania Heritage Parks program has successfully contributed to reclaiming some abandoned industrial/mining sites in the heritage area. However, resource commitment and partnerships will not be as high in this alternative as in the action.
alternatives, resulting in lesser impacts on the reclamation of abandoned mines and other damaged sites throughout the heritage area. In addition, the more limited geographic focus of the current program will likely not impact abandoned industrial and mining sites located outside the main corridor of the Schuylkill River and its major tributaries.

B. Alternative B: Places

Alternative B will likely have a significant positive impact on the restoration of damaged landscapes in the heritage area. Alternative B will direct more resources and partnerships towards restoring damaged landscapes in the heritage area than Alternative A. However, it is not likely to make as great an impact as Alternatives C and D.

Under Alternative B, the major emphasis will be on reclaiming damaged landscapes near heritage resource clusters. Abandoned industrial sites in communities along the main stem of the Schuylkill River and the main tributaries will most likely be affected by this alternative. Therefore, Alternative B is likely to restore more abandoned sites in traditional centers of activity than Alternatives A and C. Potential areas for such restoration activities include Tamaqua, Pottsville, Port Clinton, Hamburg, Reading, Pottstown, Phoenixville, Norristown, and parts of Philadelphia. This alternative will also potentially affect abandoned coal mines if they are located near a heritage resource cluster or a traditional population center such as in the Mahanoy Valley and the Pottsville areas.

The conservation and use of heritage resources to foster sustainable economic activity in traditional centers (Strategy 4A) will provide the basis for the restoration and reuse of damaged landscapes such as abandoned industrial parks and buildings. The restoration and reuse of historic buildings (Strategies 1A and 4A) will reduce blight in downtown historic and business districts. Plan recommendations to promote small business development in traditional centers (Strategies 4A and 4B) will also result in the restoration of abandoned buildings. As economic vitality in downtown districts increase, more abandoned buildings are likely to be restored.

Most of the abandoned coal mines in the heritage area would not be candidates for reclamation under Alternative B because they are located outside of traditional activity centers and away from heritage resource clusters. This alternative would also be less effective than Alternatives C and D in addressing redevelopment and restoration of abandoned industrial lands in communities away from the Schuylkill River and in more rural parts of the heritage area. Abandoned industrial sites along smaller tributaries are also not as likely to be restored.
C. Alternative C: Experiences

Alternative C will likely have a greater impact on the restoration of damaged landscapes in the heritage area than Alternatives A and B, but not as much of an impact as Alternative D. Under Alternative C, resources and partnerships will be directed towards restoring damaged landscapes that relate to visitor experience topics and regional linkages. Therefore, it is more likely to address abandoned sites outside of traditional activity centers along the Schuylkill River than Alternative B. Abandoned industrial and waterfront sites along the Schuylkill River, Schuylkill River Trail, tributary streams, and other linear corridors that provide regional linkages could be significantly impacted. In addition, the de-silting basins, a by-product of the coal industry, will likely be restored as natural habitat and could be incorporated into the open space network and cultural linkages. The development of a water quality monitoring program will aid in the determination of riparian areas in need of restoration. The development of a regional greenway strategy could include the restoration of damaged landscapes, such as abandoned coal mines in Schuylkill County. This alternative’s focus on enhancing and creating new recreational opportunities could also restore damaged landscapes as some sites could be restored as recreational destinations. Alternative C will have a lesser impact in addressing redevelopment of damaged lands located within traditional centers than Alternative B. While it will likely affect waterfront sites located within these centers, it will not focus on the redevelopment of abandoned sites that do not provide a regional connection or linkage to visitor experience topics. Therefore, abandoned industrial parks and buildings in traditional centers are not as likely to be restored through this alternative.

D. Alternative D: Layers

Alternative D will have the greatest positive impact on the restoration and redevelopment of damaged landscapes in the heritage area. Alternative D will likely leverage the most resources and partnerships for the restoration of abandoned sites. It is also likely to affect more abandoned sites than the other three alternatives due to its focus on both heritage resource clusters and visitor experience themes and linkages.

Many of the plan strategies will result in the restoration of damaged landscapes. Preservation and enhancement of historic and cultural resources (Strategy 1A) will likely involve the restoration of related abandoned buildings. The promotion of entrepreneurial activity in the heritage area (Strategy 4B) will increase economic vitality in downtown centers. Increased economic activity is likely to result in the restoration of abandoned buildings and other damaged landscapes within business districts (Strategy 4A). Development of a regional greenway strategy
and additional recreational resources will likely contribute to restoring abandoned coal mines, the de-silting basins, and damaged riparian areas (Strategies 1B, 3A, and 3B). The development of a regional water quality monitoring program (Strategy 1B) will result in the prioritization of streams and related riparian zones in need of restoration. The development of new recreational opportunities could also include the restoration of associated damaged landscapes.

4.5.2 Impacts on Rural Landscapes

A. Alternative A: No Action

Alternative A is likely to have the least positive impact on rural landscapes in the heritage area. Much of the current program’s focus is on the preservation and enhancement of cultural resources near the Schuylkill River and on the development of the Schuylkill River Trail. Development of the Schuylkill River Trail could benefit rural landscapes as lands along the trail become more attractive for preservation. Waterfront parks and rural waterfront areas along the Schuylkill River are also likely to be preserved and enhanced through this alternative, especially if they relate to the development of the Schuylkill River Trail or the Schuylkill River Water Trail. This alternative would not, however, direct resources and partnerships towards preservation of farmland or other open space.

Impacts associated with visitation are likely to be negligible under this alternative. Visitation is expected to show modest increases. In addition, heritage sites developed under this alternative will most likely be near population centers along the Schuylkill River rather than in rural areas. However, there is the potential for rural resources along the Schuylkill River Trail and Water Trail to be affected as these trails are developed and used more frequently. New trails could consume small parts of rural lands and bring trail users in proximity to sensitive rural areas such as farms, but these impacts are expected to be minimal. Moreover, the majority of the Schuylkill River Trail will be constructed on abandoned railroad beds, and measures will be taken during construction of the trail to stabilize embankments and minimize impacts on adjoining lands.

B. Alternative B: Places

Alternative B is likely to have a greater positive impact on rural landscapes in the heritage area than Alternative A because of its larger geographic scope and resource levels. However, it is expected to have significantly less impact than Alternatives C and D. Under this alternative, resources will be directed towards heritage resource clusters that are typically focused on population and activity centers. It is not likely that this alternative will preserve significant amounts of farmland.
or other open space unless located near heritage resource clusters or on the fringe of developed areas. Farms, forests, and fields on the outer edge of developed areas in Montgomery, Chester, and Berks Counties are most likely to be preserved, especially if they have a relationship to nearby heritage resource clusters. This alternative could have an indirect impact on the preservation of rural landscapes through a number of measures aimed at increasing economic activity and restoring abandoned buildings in traditional centers. Promotion of economic activity (Strategies 4A and 4B), restoration of abandoned industrial buildings (Strategies 1A and 4A), and preservation of cultural resources in traditional centers (Strategy 1A) will likely result in less development of rural landscapes as historic activity centers receive renewed attention. Some rural waterfront areas are also likely to be affected as many of the clusters of heritage resources are located near the Schuylkill River and, in some cases, in rural areas adjacent to the River or its major tributaries. Some of these rural waterfront areas could also be incorporated into the Schuylkill River Water Trail.

Alternative B is not likely to result in significant impacts from visitation and use on rural landscapes in the heritage area. While greater visitation increases are projected than for Alternative A, it is likely that visitors will be attracted to the developed areas where this alternative will focus on enhancing heritage resources. Although a few potential clusters of heritage resources are located in more rural parts of the heritage area, it is unlikely that use and visitation to these areas will significantly increase or affect rural resources. In addition, the project evaluation criteria will minimize the potential for any unintended secondary development associated with the creation of new visitor-oriented businesses.

C. Alternative C: Experiences

Alternative C is likely to have a more significant impact on the preservation of farmland and other open space in the Schuylkill River Valley than Alternatives A and B. Under this alternative, resources and partnerships are more likely to be directed towards preserving and enhancing rural lands related to visitor experience topics and regional connections. Farmland and open space are important to the rural character of the heritage area and would likely be an important attraction for visitors with special interests in heritage topics.

Farmland and open space that provide important linkages and “fill-ins” between heritage resources are most likely to be preserved. For example, the development of a regional greenway strategy is likely to contribute to the preservation of rural lands located between major parks and natural areas in order to provide continuous stretches of open space linking natural habitats and recreational resources. In addition, lands
that provide links between regionally significant cultural resources could be preserved in order to increase density of related sites along thematic linkages (Strategy 2B). This alternative's focus on the development and enhancement of recreational resources (Strategies 3A and 3B) could also increase the possibility that rural lands will be positively impacted. Rural areas located adjacent to the Schuylkill River Trail or other major regional recreational connections that have not been developed are likely candidates for preservation and incorporation into trail and recreation networks. Lastly, Alternative C's strategy of encouraging partnerships with nearby heritage areas (Strategy 2B) could result in the preservation of regionally significant lands that have a thematic link to those other heritage areas. Therefore, rural resources located along the border of the Schuylkill River Valley Heritage Area or other areas that may not have a thematic link within the heritage area could be preserved.

Alternative C is expected to minimally affect rural landscapes through visitation and use associated with its focus on developing regionally significant recreational sites. Many recreational sites that could be enhanced are likely to be in rural parts of the heritage area. Therefore, visitation increases and associated impacts are likely in rural areas. However, the Management Plan incorporates several measures intended to reduce impacts of visitation and use on rural landscapes. By encouraging the use of existing infrastructure, the potential for undesirable secondary development associated with new visitor-oriented businesses will be minimized. The project evaluation criteria will also be used to minimize the possibility that carrying capacity of sensitive rural lands will be exceeded due to the development and use of recreational sites. Development of a regional greenway strategy (Strategy 1B) and the resulting preservation of rural landscapes will more than offset any potential impacts resulting from recreational usage. It should also be noted that the provision of new recreational opportunities in rural areas often is implemented in conjunction with the preservation of sensitive natural lands. This is particularly true for the heritage area given the types of passive outdoor recreational activities that would be encouraged.

D. Alternative D: Layers

Alternative D is likely to have the greatest impact of all the alternatives on the preservation of farmland and open space in the heritage area. Resources will likely be directed towards preserving rural resources on the fringe of heritage resource clusters as well as in other parts of the heritage area, especially if they complete or contribute to the character of regional connections among heritage resources. Rural lands along streams and rivers, the Schuylkill River Trail and other regional trails, and scenic corridors are also likely to be positively impacted. In addition, the increased vitality of traditional centers promoted by this alternative
will help to foster sustainable growth and preservation of open space outside of the centers.

Several specific Management Plan strategies will help to preserve and enhance rural landscapes. The development of a regional greenway strategy (Strategy 1B) will preserve rural lands and enhance them through targeted restoration activities. It will also reduce development pressures through preservation of regionally significant open space areas. Supporting the protection of heritage resources and related open space areas, as well as land use plans that integrate heritage resource preservation (Strategies 1A and 1C), could promote the development of multi-municipal land use plans that are more likely to result in preservation of rural lands between municipalities. In addition, regional recreational resources are likely to be developed in conjunction with the preservation of related open space areas.

Like Alternative C, this alternative could result in impacts on rural landscapes caused by increased visitation to rural areas, but these impacts are expected to be minimal. This alternative is projected to have the highest increase in visitation of all the action alternatives, and the use of recreational, cultural, and natural sites in rural areas is likely to increase as well. However, the Plan strategies and actions include measures that will help to reduce the impacts of increased use of rural lands and increased visitation to the heritage area. The project evaluation criteria will help to minimize the effects of secondary development associated with visitor-oriented businesses. In addition, economic development associated with increases in heritage tourism is expected to be beneficial. It will likely increase the economic vitality of traditional centers, reducing the need for the development of rural lands. Other measures intended to reduce the effects of visitation on rural lands include minimizing the potential for visitation to exceed carrying capacity, coordinating regional preservation efforts, and encouraging voluntary stewardship.

4.5.3 Impacts on Developed and Developing Landscapes

A. Alternative A: No Action

Alternative A will likely impact communities along the Schuylkill River, but is not expected to affect these areas as much as the action alternatives because of the more limited levels of resources and partnerships. Enhancement of cultural resources and the Schuylkill River Trail will likely foster some new economic activity in towns along the Schuylkill River and create business opportunities associated with visitation to cultural or recreational sites. It will also make limited contributions to revitalizing areas that are degraded due to obsolescent land uses. This alternative will likely not impact developed or developing areas located...
away from traditional centers of activity along the Schuylkill River. There will also likely be no significant visitation impacts to developed landscapes resulting from this alternative as visitation increases are expected to be modest.

B. Alternative B: Places

Alternative B will direct resources and partnerships towards enhancing areas where heritage resource clusters are located. Therefore, it is likely to have its greatest impact on developed parts of the heritage area. The enhancement and promotion of nearby heritage resources is likely to foster redevelopment and heightened economic activity in traditional centers, especially those containing concentrations of heritage resources and located along the Schuylkill River or its main tributaries. It is likely that increased visitation to these centers will result in new businesses, which will typically use existing infrastructure as opposed to developing vacant or open space lands located outside of the centers. The reuse of abandoned or neglected buildings located in heritage resource clusters will be promoted under this alternative. Waterfront parks in traditional activity centers are likely to be affected as connections between waterfront parks and activity centers are enhanced or improved. Small green space areas in traditional centers could be preserved in association with enhancement of heritage resources. Walking tours could be established and promoted in heritage resource communities. Roads and parking areas could be improved to accommodate increased visitation. Public transportation could be enhanced to accommodate local travel for both workers and tourists.

There are some potential impacts associated with increased visitation under this alternative, but these impacts are likely to be minimal. Heritage resource communities are likely to experience increased automobile traffic due to the greater number of visitors to traditional centers. However, the development of heritage resources in close proximity to each other and walking tours connecting them will likely reduce automobile usage among visitors. Increased visitation may result in associated economic development, but this development is expected to occur in areas where infrastructure is in place. In addition, economic development is intended to be beneficial and will likely increase employment opportunities and reduce the number of abandoned buildings. Maintenance costs for roads, sidewalks, and other visitor infrastructure could slightly increase, but are likely to be offset by increased economic activity.

This alternative is not likely to impact communities that are not designated as heritage resource clusters. These communities are unlikely to experience significant visitation impacts or revitalization benefits as a result of the implementation of Alternative B.
C. Alternative C: Experiences

Alternative C will likely have a significant impact on developed and developing landscapes in the heritage area, but is unlikely to affect those areas as much as Alternatives B and D. Under this alternative, resources and partnerships will be directed towards heritage resources that are regionally significant and which create a link among visitor experience topics. Developed areas along waterways, trails, open space corridors, and scenic roadways are most likely to be affected. Traditional activity centers in the heritage area will likely experience some increased economic activity, adaptive reuse of historic resources, and redevelopment of abandoned buildings, but to a lesser extent than Alternatives B and D. Compared to Alternative B, Alternative C will affect more developed and developing areas located away from the main stem of the Schuylkill River. Several actions related to the focus of this alternative on visitor experience topics will support economic development in smaller communities and developing areas located near state and national parks, significant regional cultural resources, and recreational resources outside of the primary activity centers. Building on existing thematic programs and developing density of heritage sites along thematic linkages (Strategy 2B) will likely result in the enhancement of heritage sites and increased economic activity in smaller communities located away from traditional centers. Creating partnerships with adjacent heritage areas (Strategy 2B) could result in increased economic activity and redevelopment of communities that may have a thematic link to heritage resources outside of the Schuylkill River Valley. Building partnerships at the local level could create awareness of heritage resources in communities located just outside of traditional activity centers.

This alternative has the potential to result in visitation-related economic development in developing areas near regional heritage resources. Land on the suburban fringe could be consumed to accommodate this development, but the Management Plan strategies and project evaluation criteria encourage economic development to occur in areas where infrastructure exists. There is also the potential for increased automobile traffic due to increased visitation. However, this alternative is not likely to result in significant increases of heritage resources and associated economic activity in any one place. Therefore, visitation increases associated with this alternative are likely to be distributed throughout the heritage area and are not likely to have a significant impact on any particular local community.
D. Alternative D: Layers

Of all the action alternatives, Alternative D is likely to have the most significant impact on developed and developing areas located throughout the heritage area. It will direct preservation and enhancement efforts towards heritage resources located in traditional activity centers and towards developed and developing areas that contain heritage resources providing linkages related to visitor experience topics.

Traditional activity centers are likely to experience significant increases in economic activity and associated development as visitation increases and existing infrastructure and buildings are redeveloped to accommodate visitor-oriented businesses. Waterfront parks located in communities along the River or its tributaries will likely be enhanced and connected to downtown activity areas. Small green space areas associated with heritage resources will likely be preserved and incorporated into local park systems (Strategy 1A). Walking tours will likely be established and promoted through partnerships among local heritage resource sites (Strategies 2B and 5B). Economic activity and tourism related business opportunities will likely increase along walking tours. Road and public parking areas will likely be improved to accommodate increased visitation. Public transportation could be improved to connect heritage resource areas and to provide an alternative means of transportation for local residents and visitors.

Alternative D will also likely affect developed and developing areas near regionally significant heritage resources located away from the traditional activity centers along the Schuylkill River. Communities along scenic roads, waterways, open space corridors, and trails are likely to experience increased economic activity. Improved physical and programmatic linkages will be put in place to connect such areas with urban centers, thus promoting economic activity through increased visitation. Abandoned buildings could be restored in conjunction with the enhancement of regional heritage resources (Strategies 1A and 4A). Partnerships with other heritage resource sites, especially those in traditional centers, could increase awareness of resources located in smaller communities, further promoting economic activity (Strategies 2B and 5B).

Alternative D is projected to result in the greatest increase in visitation of all the alternatives, with the increase being distributed throughout the heritage area. While the increased visitation will promote additional economic activity, it will likely also increase traffic in traditional centers or near heritage resources. The Management Plan strategies call for economic development to occur in areas of existing infrastructure, but some levels of secondary development may occur along the suburban fringe as a result of increased visitation. However, the plan...
strategies emphasize sustainable growth and preservation of open space, minimizing the potential for these impacts to be significant. In addition, localized traffic will be reduced through walking tours and other strategies that promote the redevelopment of pedestrian-friendly historic and downtown districts.

4.6 IMPACTS ON SOCIOECONOMIC CONDITIONS

The primary socioeconomic impacts associated with the alternatives are increases in visitation and associated visitor spending, which will result in increased economic activity in the heritage area. Estimates have been developed for the five-year increase in visitation and spending, broken down by county within the heritage area and whether the visitation/spending is associated with heritage sites/attractions or events (Tables 4-1 and 4-2). Estimates have also been developed for visitor spending by visitor origin, category of spending, and season. These estimates indicate that the following shifts will likely occur within the region's tourist economy under the Action Alternatives:

1. More visitors will come from out of state
2. Spending on categories that significantly depend on out-of-state visitation (i.e., lodging, transportation, recreation/entertainment) will increase
3. Visitation will increase during off-peak seasons, particularly the winter

The following text discusses the potential socioeconomic impacts associated with each individual alternative based upon the estimates.

4.6.1 Alternative A: No Action

Alternative A assumes that current levels of resources and partnerships to promote heritage-related visitation under the State Heritage Parks program will continue. As a result, it is likely that visitation and economic impacts will increase modestly above the current baseline. Current annual visitation to the heritage area is estimated at 5,873,100, with 825,500 of those visitors attending heritage area events and 5,047,600 visiting heritage area attractions. Current estimated visitor spending is $357,987,000 annually, with $22,690,500 being spent at heritage area events and $335,296,500 being spent at heritage area attractions.

Under Alternative A, the greatest increases in visitation are likely to occur in Schuylkill County, which has the most potential for future heritage tourism growth. Visitation to Schuylkill County is expected to increase by about 16,000 or 5%, resulting in about $830,000 in additional spending. Overall, regional visitation is expected to increase
by approximately 77,000 (1.3%) and visitor-related spending is expected to increase by approximately $4.5 million (1.5%)

Table 4-1. Estimated Annual Heritage Area Visitation After Five Years, by Alternative

<table>
<thead>
<tr>
<th>ATTRACTIONS</th>
<th>EVENTS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Annual Visitation–Baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>642,400</td>
<td>224,000</td>
</tr>
<tr>
<td>Chester</td>
<td>408,000</td>
<td>9,000</td>
</tr>
<tr>
<td>Montgomery</td>
<td>518,000</td>
<td>118,000</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>3,279,700</td>
<td>352,000</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>199,500</td>
<td>122,500</td>
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<tr>
<td>Total</td>
<td>5,047,600</td>
<td>825,500</td>
</tr>
<tr>
<td>Alternative A. No Action (Additional Annual Visitation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>16,060</td>
<td>5,600</td>
</tr>
<tr>
<td>Chester</td>
<td>8,160</td>
<td>180</td>
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<tr>
<td>Montgomery</td>
<td>10,360</td>
<td>2,360</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>16,400</td>
<td>1,760</td>
</tr>
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<td>Schuylkill</td>
<td>9,975</td>
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<td>Total</td>
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<tr>
<td>Alternative B. Places (Additional Annual Visitation)</td>
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<td></td>
</tr>
<tr>
<td>Berks</td>
<td>96,360</td>
<td>22,400</td>
</tr>
<tr>
<td>Chester</td>
<td>48,960</td>
<td>900</td>
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<td>Montgomery</td>
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<td>Philadelphia</td>
<td>163,985</td>
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<td>Schuylkill</td>
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<td>Total</td>
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<tr>
<td>Alternative C. Experiences (Additional Annual Visitation)</td>
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<td></td>
</tr>
<tr>
<td>Berks</td>
<td>64,420</td>
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<td>Chester</td>
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<td>Montgomery</td>
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<td>11,800</td>
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<td>Philadelphia</td>
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<td>Schuylkill</td>
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<td>36,750</td>
</tr>
<tr>
<td>Total</td>
<td>226,460</td>
<td>142,000</td>
</tr>
<tr>
<td>Alternative D. Layers (Additional Annual Visitation)</td>
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<td></td>
</tr>
<tr>
<td>Berks</td>
<td>160,600</td>
<td>56,000</td>
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<tr>
<td>Chester</td>
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<td>Montgomery</td>
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<tr>
<td>Philadelphia</td>
<td>327,970</td>
<td>35,200</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>79,800</td>
<td>36,750</td>
</tr>
<tr>
<td>Total</td>
<td>773,970</td>
<td>142,000</td>
</tr>
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</table>

Source: Economics Research Associates
Table 4-2. Estimated Annual Heritage Area Visitor Spending After Five Years, by Alternative

<table>
<thead>
<tr>
<th>ATTRACTIONS</th>
<th>EVENTS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Annual Visitor Spending—Baseline</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$335,296,500</td>
<td>$22,690,500</td>
</tr>
<tr>
<td><strong>Alternative A: No Action (Additional Annual Visitor Spending)</strong></td>
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<td></td>
</tr>
<tr>
<td>Berks</td>
<td>$1,066,800</td>
<td>$153,900</td>
</tr>
<tr>
<td>Chester</td>
<td>$542,000</td>
<td>$4,900</td>
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<td>Montgomery</td>
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<td>Philadelphia</td>
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<tr>
<td>Schuylkill</td>
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<td>$168,300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$4,048,800</td>
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<tr>
<td><strong>Alternative B: Places (Additional Annual Visitor Spending)</strong></td>
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<td></td>
</tr>
<tr>
<td>Berks</td>
<td>$6,400,600</td>
<td>$615,600</td>
</tr>
<tr>
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<td>Montgomery</td>
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<td>Philadelphia</td>
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<td>Schuylkill</td>
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<tr>
<td><strong>Total</strong></td>
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<td>$1,501,000</td>
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<td><strong>Alternative C: Experiences (Additional Annual Visitor Spending)</strong></td>
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<td></td>
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<tr>
<td>Berks</td>
<td>$4,267,100</td>
<td>$1,539,100</td>
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<td>Chester</td>
<td>$2,710,100</td>
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<td>Montgomery</td>
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<td>Philadelphia</td>
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<tr>
<td>Schuylkill</td>
<td>$1,987,700</td>
<td>$1,010,000</td>
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<tr>
<td><strong>Total</strong></td>
<td>$15,042,400</td>
<td>$3,902,700</td>
</tr>
<tr>
<td><strong>Alternative D: Layers (Additional Annual Visitor Spending)</strong></td>
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<td></td>
</tr>
<tr>
<td>Berks</td>
<td>$10,667,700</td>
<td>$1,539,100</td>
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<tr>
<td>Chester</td>
<td>$6,775,300</td>
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<td>Montgomery</td>
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<tr>
<td>Philadelphia</td>
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<tr>
<td>Schuylkill</td>
<td>$5,300,700</td>
<td>$1,683,400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$51,410,400</td>
<td>$4,900,300</td>
</tr>
</tbody>
</table>

Source: Economics Research Associates

Regardless of the small projected increases in visitor activity, Alternative A would likely result in missed opportunities for the more rural parts of the region, especially Schuylkill County. Currently over 60% of heritage area visitation occurs in the City of Philadelphia due to the awareness of the abundance of heritage attractions in Philadelphia and supporting visitor infrastructure. However, the community revitalization and heritage goals of the Management Plan seek to impact parts of the heritage area where an increase in tourism-related employment and business opportunities would have the most effect. Therefore, Alternative A will likely have the least positive socioeconomic impact on the heritage area.
4.6.2 Alternative B: Places

Alternative B will leverage more resources (including direct funding and matching funds) and partnerships than Alternative A. It will focus these resources on preserving and improving heritage attractions and resources in geographically based places (clusters of heritage attractions and resources). Therefore, Alternative B is likely to have the greatest impact on increasing visitation and tourist spending in traditional activity centers and other areas where heritage attractions and resources are plentiful.

Annual visitation to the heritage area under this alternative is projected to increase by approximately 455,620. A large majority of the increase will be for visits to heritage area attractions as opposed to heritage area events (401,005 and 54,615 annual increase, respectively). The largest percentage increases in visitation will be to Schuylkill County, which is projected to experience an increase of approximately 58,275 or 18% overall. Philadelphia is projected to experience the highest numerical increase (approximately 171,025) but the lowest percentage increase (approximately 4.7% overall) because of its large established base of visitation. Berks County is projected to experience a significant increase in both the number of visitors (approximately 118,760) and percentage of visitation (approximately 13.7% overall). Montgomery and Chester Counties are projected to experience more moderate increases in visitation numbers (57,700 and 49,860) and percentages (9.0% and 11.9%), respectively.

Total visitor spending under this alternative is projected to increase by an estimated $28,137,500 over the baseline. Spending increases are likely to have the greatest impact on Schuylkill County where the percentage visitation increases are projected to be the highest. Total visitor dollars will still increase the most in Philadelphia; however, the impact will not be as great as in Schuylkill County due to the significant existing heritage tourism base in the City.

The above economic estimates indicate that Alternative B will have a significant impact in Schuylkill County and those places where heritage attractions are concentrated. These places are likely to experience significant increases in employment and new business opportunities. There is also the potential for some increases in population, especially in Schuylkill County, which has been steadily declining in population in recent decades.

4.6.3 Alternative C: Experiences

Alternative C is expected to leverage roughly the same level of resources (including direct funding and matching funds) and partnerships as Alternative B. It will focus these resources on preserving and improving
heritage attractions and resources that provide linkages among visitor experience topics. Therefore, Alternative C is expected to result in a greater percentage increase than Alternative B in visitation and spending at heritage area events that draw visitors with a more intense interest in particular heritage topics. However, total visitation and tourist spending are not expected to increase as much as Alternative B.

Annual visitation to the heritage area under this alternative is projected to increase by approximately 368,460 (226,460 to attractions and 142,000 to events). As in Alternative B, the largest percentage increases are projected to occur in Schuylkill, Berks, and Chester Counties (20.7%, 13.9%, and 10.3%, respectively). Montgomery and Philadelphia Counties are projected to experience significantly lower increases in visitation than in Alternative B (5.9% and 2.7%, respectively). In all five counties, increases are projected to be greater for attendance at heritage area events than for visitation to heritage area attractions.

Total visitor spending under Alternative C is estimated to increase by $18,945,100 over the baseline. Spending increases are likely to have the greatest impact in Schuylkill, Berks, and Chester Counties where visitation is expected to increase the most. However, total spending in these counties will not be as large as in Alternative B. Visitor spending will be more widely dispersed throughout the heritage area than in Alternative B, with the most impact coming in areas where regional heritage attractions are located and events take place.

Alternative C is expected to have the greatest economic impact in Schuylkill County and, to a lesser degree, Berks and Chester Counties. Employment and business opportunities will likely increase, but are likely to be associated more with heritage area events and regional attractions rather than concentrated in traditional activity centers as in Alternative B. Therefore, this alternative is likely to impact areas where heritage-related events take place or which are near regional attractions drawing visitors with a special interest in specific types of heritage resources or topics.

4.6.4 Alternative D: Layers

Alternative D is expected to leverage the most resources (including public and institutional matching funds) and partnerships of all three action alternatives. It will focus resources both on geographically based clusters of heritage attractions and resources and on regional linkages related to visitor experience topics. Therefore, Alternative D is projected to result in the largest total increase in visitation and related spending of all the alternatives.

Annual visitation to the heritage area under this alternative is
projected to increase by approximately 952,270. Visitation will increase both to heritage area attractions and events (773,970 and 178,300 estimated annual increase, respectively). As with the other alternatives, visitation increases are expected to be the greatest in Schuylkill County (43.8% percentage increase projected) and, to a lesser degree, Berks and Chester Counties (25% each). Significant increases are expected in Montgomery and Philadelphia Counties as well (20% and 10%, respectively).

Total tourist spending under Alternative D is projected to increase by $56,310,700. Spending increases are likely to have the greatest impact in Schuylkill, Berks, and Chester Counties where visitation is expected to increase the most. However, total spending will be highest in Philadelphia due to its established heritage attractions and visitor infrastructure. Tourist spending will impact areas where heritage resource clusters are located and which support regional heritage events and attractions.

As with the other action alternatives, the greatest socioeconomic impacts of Alternative D will likely be experienced in more rural counties where heritage tourism opportunities and visitor infrastructure are currently limited. Schuylkill, Berks, and Chester Counties will likely be affected the most by implementation of this alternative. Employment and business opportunities are likely to be increased both in traditional activity centers and in areas where regional heritage attractions are located and heritage-related events take place.

4.7 COMPARISON OF ALTERNATIVES

Table 4-3 provides an overall summary and comparison of the potential impacts of the four alternatives described in the previous sections of this chapter. The impacts of the alternatives on each resource category is classified as Negligible, Minor, Moderate, or Major based upon the previous evaluation. They are further categorized either as benefits where positive effects on resource categories are expected or as impacts due to construction, visitation, or use.

4.8 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the Schuylkill River Valley National Heritage Area Management Plan will require the commitment of funding, labor hours, materials to upgrade resources and facilities, and assistance from local, state and federal agencies. It is unlikely that use of these resources will have a significant adverse effect upon their availability in the future.

There is the potential for unintended secondary development to occur in revitalized traditional activity centers or near heritage resources as
visitation and economic opportunities increase. Development could convert vacant lands. However, it is expected that the majority of the development associated with increased economic vitality will be in accordance with the community revitalization and heritage tourism strategies, which emphasize development in established centers and reuse of existing buildings and infrastructure as opposed to the conversion of vacant lands.

There is also the potential for heritage resources to be overlooked and left unpreserved due to the smaller scope of Alternative A, and to a lesser degree, Alternatives B and C. If overlooked, these heritage resources

Table 4-3. Comparison of Environmental Impacts of Alternatives

<table>
<thead>
<tr>
<th>ALTERNATIVES</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Resources–Protection and Restoration</td>
<td>Negligible Benefits</td>
<td>Minor Benefits</td>
<td>Moderate Benefits</td>
<td>Moderate Benefits</td>
</tr>
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<td>Water Resources–Impacts due to Construction, Visitation or Use</td>
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<td>Minor Impacts</td>
<td>Minor Impacts</td>
<td>Minor Impacts</td>
</tr>
<tr>
<td>Air Quality and Noise–Impacts due to Construction, Visitation or Use</td>
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<td>Negligible Impacts</td>
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<td>Land Resources–Impacts due to Construction, Visitation or Use</td>
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<td>Minor Impacts</td>
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<tr>
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<td>Moderate Benefits</td>
<td>Minor Benefits</td>
<td>Major Benefits</td>
</tr>
<tr>
<td>Impacts due to Construction, Visitation or Use</td>
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<td>Minor Impacts</td>
<td>Minor Impacts</td>
</tr>
<tr>
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<tr>
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<td>Minor Benefits</td>
<td>Moderate Benefits</td>
<td>Major Benefits</td>
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<tr>
<td>Impacts due to Construction, Visitation or Use</td>
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<td>Minor Impacts</td>
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<tr>
<td>Developed and Developing Landscapes–Investment in Traditional Centers</td>
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<td>Developed and Developing Landscapes–Impacts due to Construction, Visitation or Use</td>
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<td>Minor Impacts</td>
<td>Minor Impacts</td>
<td>Minor Impacts</td>
</tr>
<tr>
<td>Socioeconomic Conditions</td>
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<td>Visitation</td>
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<td>Visitor Spending</td>
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<td>Minor Increase</td>
<td>Major Increase</td>
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</tbody>
</table>
could be irreversibly committed to other uses in the future.

### 4.9 RELATIONSHIP BETWEEN THE LOCAL SHORT-TERM USE OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Implementation of the Management Plan is likely to increase visitation over the short and long terms. Over the short term it is unlikely that visitation will significantly impact heritage resources or the heritage area environment. Over the long term, it is possible that increased visitation will result in some slight deterioration of highly visited heritage sites and local roadways. However, an increase in visitation over the short term will positively impact existing businesses. Over the long term, increased visitation will foster redevelopment and economic investment in traditional activity centers, thus increasing the economic vitality of the heritage area.

Identification of potential heritage sites is unlikely to have an immediate impact on their preservation. However, over the long term identification of potential heritage sites will likely lead to their preservation and incorporation into community revitalization activities, increasing visitor opportunities and strengthening the heritage area economy.

Construction associated with heritage site development is likely to cause a temporary disturbance to natural resources, increase noise levels, and potentially affect traffic or parking near business centers. These impacts are temporary and will benefit these areas and businesses over the long term.

### 4.10 ENERGY REQUIREMENTS AND CONSERVATION POTENTIAL

The following activities associated with implementation of the Management Plan are likely to have an impact on energy consumption in the heritage area:

- Increased visitation and likely increase in automobile usage
- Increases in heritage sites available to the public
- Redevelopment and construction activities
- Development of heritage tourism related services

An increase in trail development and in accessibility of heritage resources will likely increase the potential for energy conservation.
4.11 SECONDARY AND CUMULATIVE IMPACTS

Implementation of the Management Plan will contribute to the long-term preservation of cultural, recreational, and natural resources in the heritage area. Increased preservation of heritage resources will increase awareness of the heritage area as a region rich with recreational and cultural tourism opportunities. This will likely lead to an increase in the number of preservation organizations and efforts, further preserving heritage resources.

Increased preservation and awareness of heritage resources will also lead to increased visitation and economic vitality. Historic communities that have lost an economic base will look to heritage tourism to increase business and employment opportunities. This will likely lead to the redevelopment of abandoned buildings and reinvestment in historic centers. Revitalization of these centers will lead to an increased need for town services and utilities. Traffic levels are also likely to increase in traditional activity centers over time. In addition to beneficial economic development, it is possible that some types of unintended residential and commercial development will occur as a result of revitalization of heritage area communities.

Increased visitation and use of heritage sites is likely to increase wear and tear over the long term. Maintenance costs for recreational and cultural sites will likely increase with use.

4.12 UNAVOIDABLE ADVERSE IMPACTS

No unavoidable adverse impacts have been identified for the four alternatives at this time. Because the Management Plan and EIS are programmatic in scope, future site-specific actions may require project level environmental assessment, at which time unavoidable adverse impacts could be identified.
5.0 THE PLANNING PROCESS
5.0 THE PLANNING PROCESS: CONSULTATION AND COORDINATION

5.1 HISTORY OF PUBLIC INVOLVEMENT

The planning process began with the selection of a consultant team to prepare the Management Plan and Environmental Impact Statement (EIS) for the Schuylkill River Valley National Heritage Area in September 2001. A seven-person Steering Committee comprised of representatives of key heritage area partners was responsible for consultant selection and for guiding preparation of the Management Plan. In addition to the Steering Committee, a Task Force comprised of 23 citizens and officials broadly representative of heritage interests within the Schuylkill River Valley was formed to provide input at key points in the planning process. The project officially began in December 2001 with a kickoff meeting of the Steering Committee. Steering committee meetings have been held consistently throughout the planning process since the kickoff meeting. At every stage of the process, documents were available and comments solicited through a special Management Plan and EIS section of the SRGA website (www.schuylkillriver.org). Other components of the public involvement program are summarized below.

1. Scoping (February to May 2002)

Public involvement and project scoping began with interviews of approximately 40 stakeholders in early 2002. Stakeholders included representatives of economic development agencies; environmental and historic preservation organizations; heritage area sites and attractions; and federal, state, and local governments. In conjunction with these stakeholder interviews, an initial set of public meetings were held in March 2002 in Philadelphia, Pottstown, and Pottsville. At these meetings, the consultant team gave an overview of the Schuylkill River Valley National Heritage Area and received input on the key heritage resources in the area, issues that should be addressed by the Management Plan, and how the heritage area could benefit local communities and the region. In April of 2002, the Schuylkill River Valley National Heritage Area Task Force met to review and discuss the results of the public meetings. The scoping process culminated with preparation of a Scoping Report in May 2002.

2. Plan Development (June to October 2002)

Following the March public meetings, the Steering Committee and consultant teams worked to develop a draft set of primary interpretive themes for the heritage area. A second Task Force meeting was
convened in June 2002 to discuss the primary interpretive heritage area themes under development for the Management Plan and to prepare for development of Plan Alternatives. The Task Force Meeting was followed by a second series of public meetings conducted in Philadelphia, Pottstown, and Pottsville in September 2002 to present and obtain feedback on the primary interpretive themes and the Plan Alternatives. In October 2002 the Task Force met again to discuss the results of the September public meetings and to set the stage for preparation of the Draft Management Plan and EIS.


Preparation of the Draft Management Plan and EIS was completed in February 2002. The Notice of Availability of the Draft EIS was published in the Federal Register on March 21, 2003. A third and final series of public meetings was conducted in Philadelphia, Pottstown, and Pottsville from April 22 to 24, 2003 to present and receive public comment on the Draft Management Plan and EIS. The public comment period on the Draft EIS concluded on May 20, 2003, after which the Final Management Plan and EIS were prepared. The Final EIS includes responses to comments and questions received during the public review period (see Section 5.8 below).

5.2 AGENCIES AND ORGANIZATIONS CONSULTED

The following is a list of agencies and organizations consulted during development of the Management Plan and EIS.

Federal Agencies
• National Park Service
• Hopewell Furnace National Historic Site
• Valley Forge National Historical Park

State Agencies
• French Creek State Park
• Pennsylvania Department of Environmental Protection
• Pennsylvania Department of Conservation & Natural Resources
• Pennsylvania Historical and Museum Commission

Berks County
• Berks County Planning Commission
• Berks County Parks and Recreation Department
• Reading-Berks Convention and Visitors Bureau
• Hamburg Borough Manager
• Hamburg Borough Council
Chester County
• Chester County Heritage Preservation
• Chester County Economic Development Corporation
• Chester County Conference and Visitors Bureau
• Phoenixville Area Chamber of Commerce
• East Vincent Township
• North Coventry Township

Montgomery County
• Montgomery County Deputy Chief Operating Officer
• Montgomery County Planning Commission
• Pottstown Economic Development Director
• Valley Forge Convention and Visitors Bureau

Philadelphia County
• Philadelphia Convention and Visitors Bureau

Schuylkill County
• Schuylkill County Chamber of Commerce
• Schuylkill County Visitors Bureau
• Schuylkill Conservation District
• Schuylkill County Economic Development Director
• Schuylkill County Commissioner
• Pottsville City Administrator
• Shenandoah Chamber of Commerce
• Tamaqua Downtown Manager
• Tamaqua Borough Council

Other Organizations
• National Center for the American Revolution
• Jerry’s Classic Cars & Collectibles Museum, Pottsville
• Delaware & Lehigh National Heritage Corridor
• Philadelphia Water Department
• Water Works Interpretive Center
• Berks County Conservancy
• Daniel Boone and Conrad Weiser Homesteads
• Tri-County Chamber of Commerce
• Conservancy of Montgomery County
• Phoenixville Area Economic Development Corp.
• Schuylkill River Development Council
• Greater Norristown Corporation
• PECO Energy
• Pennsylvania Environmental Council
• Manayunk Development Corporation
• Greater Philadelphia First
• French & Pickering Creeks Conservation Trust
• Green Valleys Association
• Schuylkill Center for Environmental Education
• Hawk Mountain Sanctuary
• Orwigsburg Historical Society
• Schuylkill County Coalition of Historical Societies and Museums
• Schuylkill River Greenway Association

5.3 SUMMARY OF MAJOR ISSUES IDENTIFIED

The following heritage area issues and sub-issues were identified during the public scoping period.

• Visibility of the heritage area
  – Marketing
  – Education
  – Identity of the Schuylkill River Watershed
  – Signage

• Economic development
  – Return on investment
  – Assistance to small businesses

• Need for connections
  – Access to the River
  – Trails
  – Transportation corridors
  – Thematic connections (internal and external to neighboring heritage areas)

• Resource protection
  – Water quality maintenance and restoration
  – Impacts of heritage area activities and visitation
  – Threats to open space, agricultural, environmental, and recreational resources

• Historic preservation
  – Historic district designation
  – Rehabilitation/adaptive reuse of historic properties and materials
  – Identification of lost resources

• Quality of life

• Coordination
  – Governmental jurisdictions
  – Private organizations

• Reaching diverse ethnic communities

• Need for focus
5.4 AGENCY COORDINATION

During the initial scoping process a letter describing the project and requesting input on issues of concern was sent to representatives of state and federal agencies that would potentially have interest in the Management Plan and EIS. Response letters were received from two of the agencies, the United States Coast Guard and the U.S. Army Corps of Engineers, indicating support for the heritage area initiative. The following is a list of representatives and agencies to whom letters were sent.

- The Honorable Robert Borski, U.S. House of Representatives
- The Honorable Robert Brady, U.S. House of Representatives
- Robert Callegari, U.S Army Corps of Engineers – Planning
- John Carpenter, U.S. Department of Housing & Urban Development
- Carol Collier, Delaware River Basin Commission
- John Coscia, Delaware Valley Regional Planning Commission
- Anthony Cunningham, Office of U.S. Senator Arlen Spector
- William DeVito, Office of U.S. Senator Rick Santorum
- Joseph DiBello, National Park Service
- The Honorable Mike Doyle, U.S. House of Representatives
- The Honorable Phil English, U.S. House of Representatives
- The Honorable Chaka Fattah, U.S. House of Representatives
- Tom Ford, Pennsylvania Fish and Boat Commission
- Paul Gaudini, U.S. Army Corps of Engineers – Planning
- Don Gephart, Pennsylvania Department of Conservation & Natural Resources
- Dr. Brent Glass, Pennsylvania Historic and Museum Commission
- Robert Guami, U.S. Environmental Protection Agency, Region III – Brownfields
- Gerard Hertel, U.S. Forest Service
- The Honorable Joe Hoeffel, U.S. House of Representatives
- The Honorable Tim Holden, U.S. House of Representatives
- Donald Kerns, U.S. Postal Service
- Barry Leatherman, U.S. Army Corps of Engineers
- Carol Lee, Pennsylvania Historic and Museum Commission
- Bill Manner, Pennsylvania Department of Environmental Protection
- Thomas Majusiak, U.S. Federal Emergency Management Agency, Mitigation Division
- Jay McGee, Pennsylvania Department of Transportation
- Natural Resource Conservation Service, Community Assistance & Resource Development Division
- Pennsylvania Department of Environmental Protection, Southern Regional Office
• Joseph Piotrowski, U.S. Environmental Protection Agency, Region III
• The Honorable Joseph Pitts, U.S. House of Representatives
• Marie Rust, National Park Service
• Flavia Rutkowski, U.S. Fish and Wildlife Service, Northeast Region
• The Honorable Richard Santorum, U.S. Senate
• The Honorable Arlen Specter, U.S. Senate
• Glen Stevens, U.S. Army Corps of Engineers
• Tom Stolle, U.S. Environmental Protection Agency – Brownfields Economic Development Initiative
• Barbara Stratton, U.S. Army Corps of Engineers
• U.S. Coast Guard – 5th District
• U.S. Department of Transportation, Federal Highway Administration
• C. Lee Ware, U.S. Army Corps of Engineers – Planning
• The Honorable Curt Weldon, U.S. House of Representatives
• Joseph Yarborough, Pennsylvania Department of Community and Economic Development

5.5 SUMMARY OF STEPS TAKEN TO IDENTIFY AND INVOLVE LOW-INCOME AND MINORITY COMMUNITIES

The following efforts included attempts to identify and involve low income and minority communities:

• Consultation with local government officials in all heritage area counties
• Consultation and involvement of non profit organizations representing heritage area residents
• Public involvement through three sets of public meetings in different parts of the heritage area

5.6 LIST OF PREPARERS

CONSULTANT TEAM

Wallace Roberts & Todd, LLC, Lead Consultant
David Hamme, Principal-in-Charge
David Rouse, Project Director
Nick Napoli, Project Planner
Sarah Endriss, Project Planner

Economics Research Associates
Bill Owens, Principal-in-Charge
David Versel, Project Director

History Now
Avi Decter, Principal
5.0 The Planning Process

5.1 STEERING COMMITTEE

Dixie F. Swenson, former Executive Director, Schuylkill River Greenway Association
Jane L. S. Davidson, Chester County Parks and Recreation Department
Dennis DeMara, Pennsylvania Department of Conservation and Natural Resources
Joseph DiBello, National Park Service
Mark Major, Schuylkill County Visitors Bureau
Kay Smith, Manayunk Development Corporation
Mike Stokes, Montgomery County Planning Commission

5.7 LIST OF RECIPIENTS

The following agencies were sent copies of the Draft Management Plan and EIS.

FEDERAL AGENCIES

Delaware River Basin Commission
Federal Emergency Management Agency
U.S. Army Corps of Engineers
U.S. Coast Guard
U.S. Department of Housing and Urban Development
U.S. Department of the Interior, National Park Service:
  − Northeast Regional Office
  − Hopewell Furnace National Historic Site
  − Valley Forge National Historical Park
U.S. Department of the Interior, United States Fish and Wildlife Service
U.S. Department of Transportation, Federal Highway Administration
U.S. Environmental Protection Agency, Region III
U.S. Fish and Wildlife Service
U.S. Forest Service
U.S. Natural Resource Conservation Service
U.S. Postal Service

STATE, REGIONAL, AND LOCAL AGENCIES

Berks County Commissioners
Berks County Planning Commission
Chester County Commissioners
City of Philadelphia
Delaware Valley Regional Planning Commission
Montgomery County Commissioners
PA Department of Conservation and Natural Resources
PA Department of Environmental Protection
5.8 RESPONSES TO COMMENTS

The following questions and comments on the Draft Management Plan and Environmental Impact Statement (EIS) were made during the three public hearings or received in writing during the public comment period.

Question: Which has the greatest priority, resource conservation or economic/community development?

Response: A fundamental premise of the Management Plan and EIS is that resource conservation and economic development are not mutually exclusive, but can work together for the benefit of the quality of life of local communities. Hence both are important, as the conservation of heritage resources provides the foundation for sustainable economic activity (e.g., heritage tourism) based on those resources.

Question: How is farmland preservation addressed in the Management Plan and EIS?

Response: The Management Plan characterizes the agricultural landscape as an important heritage resource in the Schuylkill River Valley. Section 3.4.2 identifies the conversion of farmland to suburban development as an important land use issue and describes current farmland preservation efforts by heritage area counties. Strategy 1C calls for sustainable land use, open space, and greenway planning and preservation related to the Schuylkill River Valley's cultural and natural landscapes. Farmland preservation initiatives involving partnerships among agencies and organizations in the heritage area are covered by this strategy.

Questions: How is the carrying capacity of the Schuylkill River addressed in the Management Plan and EIS?

What can be done to change the current health of the River?

Response: Improving the water quality of the Schuylkill River is an integral part of the “Reclaiming the River” interpretive theme. One of the priority action recommendations of the Plan is to institute a coordinated, watershed-wide water quality monitoring program. This program will provide...
baseline information for monitoring changes over time and identifying needs for projects to improve water quality in different parts of the watershed.

Question: How will headwater areas not included within the Schuylkill River Valley National Heritage Area (i.e., located within the overall watershed but not within one of the five counties that are covered by the heritage area) be addressed?

Response: Because of the limits of congressional authorization, such headwater areas are not addressed by the Management Plan and project funding under the National Heritage Areas program will be limited to the officially designated boundaries. However, the intent of the initiative is not to set barriers, but rather to encourage collaboration and coordination among a variety of local, state, and federal agencies. Thus the heritage area management entity can work with other organizations to leverage resources and funding sources in order to address areas outside of the officially designated boundaries.

Question: Was the establishment of the new Cabela’s store accounted for in the projections for the preferred alternative?

Response: The proposal for a Cabela’s retail destination within the heritage area near the Schuylkill/Berks County line emerged during preparation of the Management Plan. For this reason and because it is unclear until the store opens what kind of visitation it will attract, Cabela’s was not taken into account in the projections. It is clear that the store has the potential to significantly increase heritage tourism in the region. However, linkages to other heritage attractions and communities are needed if this increase is to be realized.

Comment: The analysis of environmental consequences is more qualitative than quantitative.

Response: Because the Management Plan is programmatic in scope, the Environmental Consequences chapter does not discuss impacts at the site-specific project level. Instead, it generally addresses the types of impacts that could be associated with the strategies and action items emphasized by each of the alternatives. Additional assessment of environmental impacts may be necessary for future site-specific projects involving federal funding or action. The Final Management Plan and Environmental Impact Statement have been revised to emphasize this point (p. 4-1).
Comment: The Berks County Planning Commission recognizes and supports the mission, vision statement, goals, and strategies of the Schuylkill River National Heritage Area.

Response: The support expressed by the Berks County Planning Commission for the Schuylkill River Valley National Heritage Area is appreciated. Successful implementation of the Management Plan will be dependent upon partnerships with counties, other governmental agencies, private organizations, and citizens throughout the planning area.

Comment: The Berks County Planning Commission recommends that additional Berks County resources be included in the Chapter 3.0 (Affected Environment).

Response: The description of heritage resources in Chapter 3.0 is intended to be illustrative rather than exhaustive in scope. It is impossible to address all of the heritage resources in such a large and complex area within the scope of the Management Plan. Nevertheless, some of the resources identified by the Berks County Planning Commission have been included in the Final Management Plan and EIS.

Comment: The Berks County Planning Commission recommends that all county and regional planning agencies in this National Heritage Area be offered the chance to review this document.

Response: All five heritage area counties, as well as the Delaware River Basin Commission and the Delaware Valley Regional Planning Commission, were included on the distribution list for the Draft Management Plan and EIS.

Comment: The Hopewell Furnace National Historical Site should be included in the list of national and state parks in Section 3.3.1 of the Affected Environment chapter. Also, the Appalachian Trail is a unit of the National Park Service.

Response: The Final Management Plan and EIS have been revised to address these comments.

Comment: While site-specific impact analyses may not be available or appropriate at this stage of planning, we [the Environmental Protection Agency] suggest that the Final EIS include a discussion of the types of impacts usually associated with the “actions” described throughout Chapter 2.0 (Plan Alternatives).
Response: As noted above, the level of impact analysis is geared toward the programmatic scope of the Management Plan and EIS. Additional assessment of environmental impacts may be required as necessary under the NEPA process for future site-specific projects involving federal funding or action. Nevertheless, Chapter 4.0 (Environmental Consequences) has been extensively revised for the Final Management Plan and EIS to address the anticipated environmental impacts of the types of actions anticipated under Management Plan programs in more depth and to tie the discussion of impacts more closely to the strategies and actions contained in Chapter 2.0

Comment: Regarding the impacts to National Parks, Monuments, and Forests, it was stated that there would be no impairment from the project, however, there was no discussion if any impact would occur to the parks, monuments, or forests.

Response: The Draft Management Plan and EIS states that the potential impacts on National Park Service properties within the heritage area have been reviewed and it has been determined that impairment will not occur. National Park Service properties or units in the heritage area include Valley Forge National Historical Park, Hopewell Furnace National Historical Site, and the Appalachian Trail. Chapter 4.0 (Environmental Consequences) of the Final Management Plan and Environmental Impact Statement has been revised to specifically address impacts to these properties.

Comment: EPA suggests that if additional impact assessment is not completed prior to the issuance of a Record of Decision, future actions associated with this Draft Management Plan and EIS (federal funding or require major federal actions) should undergo additional NEPA project level assessment prior to implementation.

Response: As noted, Chapter 4.0 (Environmental Consequences) of the Final Management Plan and EIS has been revised to more extensively address potential environmental impacts associated with the plan strategies and actions. Because the Management Plan is programmatic in scope, future actions may be required to undergo project level environmental assessment prior to implementation as required by NEPA.

Comment: The Management Plan ultimately may involve some development in areas designated by the Federal Emergency Management Agency (FEMA) as Special Flood Hazard...
Areas. Any such development will require compliance with floodplain management ordinances of local communities. This project is also subject to Executive Order 11988, which directs federal agencies to “avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.”

Response: Floodplain impacts resulting from the Management Plan are expected to be minimal and limited to the establishment of outdoor recreational facilities, including trails and boat landings on already disturbed areas within the 100-year floodplain. Any proposed development within Special Flood Hazard Areas will be required to comply with all local, state, and federal applicable regulations and policies.
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6.0 REFERENCES


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*Commonwealth of Pennsylvania, Department of Conservation and Natural Resources “Listing of Threatened and Endangered Species in the Schuylkill Watershed.” 2002*

*Pennsylvania State Parks Web Site, http://www.dcnr.state.pa.us/stateparks/index.htm*

*Commonwealth of Pennsylvania, Department of Conservation and Natural Resources, Bureau of Forestry Weiser State Forest Web Site, http://www.dcnr.state.pa.us/forestry/stateforests/forests/weiser/weiser.htm*

*Commonwealth of Pennsylvania, Department of Environmental Protection “Listing of Exceptional Value Streams in the Schuylkill Watershed”*


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“Listing of Streams Supporting Native Trout Populations.”
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Commonwealth of Pennsylvania, Montgomery County, Department of Parks
Green Lane Park Web Site, http://www.montcopa.org/parks/green%20lane.htm

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1999 Pennsylvania Economic Impact Report, 2000
Pennsylvania Heritage Tourism Study. 1999


Hosmer, Charles.


Longwoods International for Greater Philadelphia Tourism Marketing Corporation
The 2000 Travel Year: Profile of Visitation to the City of Philadelphia vs. Other Four Counties


Manayunk Development Corporation
2000 Annual Report
Next Steps for Manayunk, 1998
The Manayunk Canal, 1993


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Montgomery County.

  *Creating an Open Space Legacy: Montgomery County Open Space Plan.* 1996.


Schuylkill River Heritage Corridor

Schuylkill River Greenway Association
  Web Site, http://www.schuylkillriver.org

  “Schuylkill River Trail System” (map)

  “Schuylkill River Water Trail” (guide)

Schultz & Williams


U.S. Army Corps of Engineers, Philadelphia District
U.S. Department of Agriculture, Natural Resources Conservation Service
“Digital Soil Survey for Berks County”
“Digital Soil Survey for Chester County”
“Digital Soil Survey for Montgomery County”
“Digital Soil Survey for Philadelphia County”
“Digital Soil Survey for Schuylkill County”

U.S. Department of the Interior, National Park Service, Mid-Atlantic Regional Office

U.S. Department of the Interior, United States Geologic Survey


LIVING WITH THE RIVER: Schuylkill River Valley National Heritage Area
Draft Management Plan and Environmental Impact Statement

SCOPING REPORT
May 2002

Introduction
This report presents the results of initial scoping conducted for the Schuylkill River Valley National Heritage Area Management Plan and Environmental Impact Statement (EIS). The purpose of scoping was to identify issues of concern and areas of focus to be addressed in the Management Plan and EIS. The following activities were conducted as part of the initial scoping:

1. The consultant team conducted interviews with approximately 40 stakeholders representing key organizations and interests in the heritage area.
2. A series of public meetings were conducted in three locations within the heritage area. Approximately 100 members of the public attended the three meetings.
3. A meeting was held with the Schuylkill River Valley National Heritage Area Task Force to review the results of the public meetings and to discuss developing “areas of focus” for the Management Plan. The Task Force is comprised of persons representing public and private agencies, organizations, and institutions with a particular interest in the heritage area.
4. A letter was distributed to approximately 40 governmental agencies and representatives to solicit input on potential issues of concern.

The report is divided into five sections. The first four sections summarize the results of each of the above activities. Based upon the results of the initial scoping, the concluding section discusses a direction for developing areas of focus for the Management Plan and EIS.

1. Stakeholder Interviews
Stakeholders interviewed included representatives of economic development agencies, environmental and historic preservation organizations, heritage area attractions, and federal, state, and local governments. (A complete list of persons interviewed is provided in Sub-Appendix 1.) Stakeholders were generally asked to address the following questions:

1. What is the mission of your organization? How does or could this mission relate to the Schuylkill River Valley National Heritage Area?
2. How much do you know about the heritage area initiative? Do you see potential benefits to be derived from this initiative for your organization, community, and/or the region as a whole?
3. What is the current state of awareness of the heritage area?
4. What projects, initiatives, and programs do you have underway or know of that are of interest for the heritage area?

5. What issues should be addressed in the Management Plan and Environmental Impact Statement (e.g., historic and natural resource preservation, economic development, education/interpretation, outdoor recreation, etc.)?

The input received from stakeholders was wide-ranging and diverse, addressing a variety of issues depending upon individual perspectives, affiliations, and geographic locations within the heritage area. The following text summarizes some of the special opportunities and issues identified by stakeholders.

Resources/Interpretation

- Reflecting its geographic size and complexity, the heritage area is rich in historic, cultural, recreational, and natural resources. Places such as Schuylkill County have their own unique resources and stories to tell. However, there is a need for an overall unifying framework that can accommodate interpretive and programmatic connections between individual resources and attractions.

- Resources and attractions should be linked in various ways – based upon stories or interpretive themes, or physically even if the stories are not directly related. From this perspective the trail along the river is an important unifying element. To maximize the effectiveness of this element, increased access to and recreational opportunities along the river are needed, and the physical presence of the trail when fully developed needs to be augmented with information and interpretation.

- Water and water quality are a major unifying element for the heritage area. Getting people out on the river through boat tours and events such as the Sojourn is one way to take advantage of this element. “Restoring” or “reclaiming” the river is a particularly compelling theme.

- Agriculture is an integral part of the history of the heritage area. Berks, Chester, and Montgomery Counties all have active farmland preservation programs. Preserving agriculture as a viable economic activity requires not just purchase of development rights on farmland, but also maintaining the industrial infrastructure necessary to support it. For example, Berks County’s economic development strategy includes establishment of an “agribusiness park.”

- The Schuylkill River Valley is one of the only places in America where people can learn about 300 years of iron and steel production.

- Education is an important facet of the heritage area initiative and should begin with teaching school children about the region’s cultural and natural heritage.

Connections

- Connections – interpretive (see above), physical, programmatic, marketing, etc. – are a recurring theme. The Schuylkill River trail and connections (e.g., the Perkiomen Creek trail under development by Montgomery County from Valley Forge to Green Lane Park) is an example of a physical connection that will contribute to tying the heritage area together. Another is the planned Schuylkill Valley Metro line from Philadelphia to
Reading (with potential for a connection to the intermodal transportation facility planned for Pottsville). A third is the rail excursion program that has operated on the Reading, Blue Mountain, & Northern Railroad tracks in Berks and Schuylkill Counties. Connecting heritage festivals in communities along the River to an event such as the Sojourn is an example of a programmatic connection. Joint packages offered by different attractions and hospitality businesses is an example of a marketing connection.

Communities

- Older communities such as Norristown, Conshohocken, and Phoenixville have an opportunity to focus on the Schuylkill River to enhance economic activity and quality of life. Greenways are identified as an economic development device in the Montgomery County Schuylkill River Greenway Stewardship Study. Schwenksville (located on the Perkiomen Creek) is positioning itself as Pennsylvania’s first “greenway community” as a key to its economic development.
- The heritage area has the potential to improve quality of life in older communities through increased recreation, compatible economic development, and preservation, adaptive use, and interpretation of historic resources. Revitalizing older communities could help counteract the current pattern of sprawl and consumption of rural resources by development.

Tourism

- Tourism issues and needs vary from county to county. Schuylkill County has the least developed visitor infrastructure (attractions and hospitality businesses) and the most to gain from increased visitor activity. Other counties have more established visitor infrastructure and focuses for tourism (e.g., Reading outlets, Valley Forge National Historical Park). Philadelphia is densest in terms of attractions and while the Schuylkill River is considered a good amenity, it is relatively minor compared to other things to do and see in the City. Convention visitors generally do not travel far from Philadelphia to see other attractions.
- While Reading has traditionally focused on the outlets as its primary visitor strategy, visitation to these attractions is declining annually. Thus there is increasing interest in enhancing heritage tourism.
- The National Center for the American Revolution planned for the Valley Forge National Historical Park will be a major boost for visitation to the Valley Forge area. The Center is envisioned as the nation’s gateway to the American Revolution heritage experience.

Outdoor Recreation

- Outdoor recreation (hiking, fishing, hunting, etc.) is an extremely important visitor activity, particularly in the northern part of the heritage area. In Schuylkill County it is currently the strongest tourism theme, more important than heritage tourism. The Appalachian Trail is an outdoor recreational resource of national significance.
- The heavy recreational usage of Valley Forge National Historical Park and the Philadelphia-Valley Forge trail provides an opportunity to introduce recreational users to
the heritage area. The park provides an opportunity to link recreation with the heritage experience, including an increased focus on the Schuylkill River.

- In addition to existing recreational resources open to the public there are sites that could potentially be developed for compatible outdoor recreation. Examples include the Owl Creek Reservoir (owned by Tamaqua Borough) and Lake Ontelaunee (owned by the Reading Water Authority).

Visibility
- The profile of the existing heritage area (Schuylkill River Heritage Corridor under the Commonwealth of Pennsylvania’s Heritage Parks Program) is quite low. Most residents are unaware of the heritage area, and even some tourism and economic development professionals know little of its activities. This issue highlights the importance of getting the word out if the heritage area initiative is to realize its full potential.
- The limited number of visual indicators of the Heritage Corridor (e.g., graphic images, wayfinding signage, historic markers, references in tourism marketing brochures) contributes to its low profile.

Organizational Resources
- There is a strong network of environmental organizations active in the heritage area, including organizations such as the Berks County Conservancy, Natural Lands Trust, Pennsylvania Environmental Council, and a number of watershed-based nonprofit groups.
- The National Park Service is a resource that can provide technical and other forms of assistance for heritage area programs.

Relationship to Other Heritage Areas
- Part of the role of the Schuylkill River Valley National Heritage Area is to work with the other two heritage areas (Delaware and Lehigh, Lackawanna) in northeastern Pennsylvania to tell the anthracite story. Tamaqua, which has perhaps the most developed visitor infrastructure in Schuylkill County, is being positioned as the “front door” to the Schuylkill River Valley National Heritage area from Jim Thorpe and the Delaware and Lehigh National Heritage Area.

2. Public Meetings

Meetings to solicit public input on issues that should be addressed in the Management Plan and EIS were conducted in the following three locations in the heritage area:

- Lloyd Hall (Fairmount Park), Philadelphia – March 19, 2002
- Montgomery County Community College West Campus, Pottstown – March 20, 2002
- Quality Inn and Suites, Pottsville – March 21, 2002
The meetings began with a presentation summarizing the project background and purpose and providing an overview of major resources within the heritage area. Attendees were then asked to address the following three questions:

1. What are the key resources of the heritage area?
2. What issues need to be addressed in the Management Plan and Environmental Impact Statement?
3. How can the heritage area benefit your community and the region as a whole?

Meeting attendees in Pottstown and Pottsville were divided into three breakout groups to address the three questions. In Philadelphia, attendance was lower than in the other two locations and thus attendees addressed the questions as one group. The following is a summary of the responses received to the three questions. (A complete list of public comments recorded at the three meetings is provided in Sub-Appendix 2.)

**Resources**

- The Schuylkill River and its ecosystem
  - The River and riverbank
  - Tributaries
  - Watershed lands

- Other natural resources
  - Water/water quality
  - Wildlife habitat/woodlands/wetlands
  - Geology

- Communities along the River

- Historic resources
  - Individual historic sites
  - Historic buildings and structures
  - Canal/railroad
  - Archaeological resources

- Cultural resources
  - Stories of human use of resources: industrial/coal/labor heritage, agricultural use of the land, etc.
  - Ethnic heritage/diversity
  - Arts and culture

- Recreational resources
  - Parks
Trails  
Outdoor recreation activities (boating, fishing, hunting)

• Scenic resources  
  - Landscapes (farmland, etc.)  
  - Views/viewsheds  
  - Scenic roads  
  - Fall foliage

• Organizational resources  
  - Governmental agencies  
  - Private organizations and institutions  
  - Professionals/volunteers

• Educational value of resources

Issues
• Visibility of the Heritage Area  
  - Marketing  
  - Education  
  - Identity of the Schuylkill River Watershed  
  - Signage

• Economic development  
  - Return on investment  
  - Assistance to small businesses

• Need for connections  
  - Access to the River  
  - Trails  
  - Transportation corridors  
  - Thematic connections (internal and external to neighboring heritage areas)

• Resource protection  
  - Water quality maintenance and restoration  
  - Impacts of Heritage Area activities and visitation  
  - Threats to open space, agricultural, environmental, and recreational resources

• Historic preservation  
  - Historic district designation  
  - Rehabilitation/adaptive reuse of historic properties and materials
Identification of lost resources

• Quality of life

• Coordination
  – Governmental jurisdictions
  – Private organizations

• Reaching diverse ethnic communities

• Need for focus

Benefits

• Economic development
  – Tourism
  – Downtown/community revitalization
  – Local business development/employment

• Resource preservation and enhancement
  – Environmental restoration (water quality)
  – Historic preservation

• Education/“Living Classroom”
  – Environmental resources
  – Historic/cultural resources

• Opportunities for recreation
  – Trails
  – Hiking/biking/boating
  – Hunting/fishing

• Regional connections/linkages
  – River
  – Greenway
  – Trails
  – Focus on things that unify the region

• Quality of life – all of the above and:
  – Residents’ pride/awareness of resources
  – Enhanced image/identity
  – Retention of population
• Activities for families, children
  – Establish a framework for decision-making
    – Cooperation/coordination at regional level
    – Address needs of local communities

3. Task Force Meeting
The Schuylkill River National Heritage Area Task Force met for the first time on April 8, 2002 to review the results of the public meetings and to discuss developing “areas of focus” for the Management Plan (see Section 5 below). (A list of Task Force members is provided in Sub-Appendix 3.) The above summary of public meeting comments includes minor refinements made by the Task Force to clarify and emphasize points they felt to be important. Farmland preservation and agriculture as an economic activity were identified as a particular issue of concern.

4. Agency Coordination
As part of the initial scoping process, a letter describing the project and requesting input on issues of concern was sent to representatives of state and federal agencies with a potential interest in the heritage area initiative. (A list of agencies and representatives to whom letters were sent is provided in Sub-Appendix 4.)

Letters of response were received from the United States Coast Guard and the U.S. Army Corps of Engineers. Both letters indicated support for the heritage area initiative. The Corps representative noted that Corps interest in the Schuylkill River is “expanding”:

_In March 2000, the U.S. House of Representatives Committee on Transportation and Infrastructure adopted a resolution that directs the Corps to study this watershed for issues related to environmental restoration and protection, comprehensive stream corridor management, flood control, recreation, water quality control, and other related water resource problems….If funds are received to initiate this study (possibly in 2003), we will certainly coordinate further with the Schuylkill River Greenway Association regarding our activities. (letter from Paul Gaudini, P.E., Acting Chief, U.S. Army Corps of Engineers, Philadelphia District Planning Division)_

The planning process for the Management Plan and EIS will include additional agency coordination activities, including formation of a Technical Advisory Committee of agency representatives to provide input into plan development.
5. Conclusion: Defining Areas of Focus

Because the Schuylkill River Valley National Heritage Area is so large and its resources so diverse, strategic focus is needed if the Management Plan is to be effective. Thus the approach to preparing the Management Plan relies on identification of “areas of focus” (geographic, interpretive/thematic, programmatic, institutional) to guide plan development and implementation. One of the purposes of the initial scoping process is to provide an understanding of the issues and ideas considered most important by stakeholders and the public in order to inform definition of areas of focus for the Management Plan and EIS. The following approach to defining areas of focus was formulated based upon the results of the stakeholder interviews and public meetings and refined through input received at the April 8 Task Force meeting.

Unifying Concept

The approach begins with establishment of a unifying concept that ties the heritage area together and provides the foundation for preserving, enhancing, developing, and interpreting the area’s rich resources, traditions, and stories. The unifying concept is:

**The Schuylkill River Valley, its ecosystem, and human use of and impacts on its resources over time.**

Regionally Significant Resources

The size and scale of the heritage area necessitate focusing on regionally significant resources as the basic structure around which the plan will be built. Five criteria have been established to define regionally significant resources:

- **Significance** (historical or other)
- **Linkage** (to other heritage area resources – physical, interpretive, etc.)
- **Recognition** (as measured by awareness and/or level of visitation/use)
- **Infrastructure** (available to support visitation)
- **Density/intensity** (part of a concentration of resources offering a depth of experience)

While resources do not necessarily need to meet all of the criteria to qualify as regionally significant, they should rate highly in at least three of the five. It should be noted that this concept is a fluid one, in that 1) resources do not necessarily have to be regionally significant to fit into the heritage area initiative and 2) the resources defined as regionally significant may change over time.

Regionally significant resources as defined by the above criteria fall into four categories related to the unifying concept:

- **Natural/Agrarian** (resources and landscapes that have supported and continue to support human activities in the Schuylkill River Valley – water, farmland, etc.)
• **Historic/Cultural** (the Valley’s heritage of historic places and events, traditions, and stories)
• **Recreational** (regional scale outdoor recreation facilities and activities)
• **Communities** (past and present human settlements in urban to rural settings)

**Connections**
Establishing connections among regionally significant resources is essential to maximize the effectiveness of the heritage area. The following types of connections are considered part of the structure of regionally significant resources:

• **Physical** (the River and its tributaries; transportation facilities such as roads, railroads, and trails; and similar features that physically connect heritage area resources)
• **Interpretive** (programs and themes in common to link resources that have related stories to tell)
• **Marketing** (joint efforts to promote heritage area attractions and sites)

**Framework for Implementation**
The final element of the approach is establishment of a programmatic framework that provides direction to public and private agencies, organizations, and institutions in undertaking actions in support of the unifying concept and overall heritage area initiative. This framework needs to focus on those programs and actions that will be most effective in leveraging limited available resources to achieve the mission established by Congress for the Schuylkill Valley National Heritage Area:

> To conserve, interpret and develop the historical, cultural, natural and recreational resources related to the industrial and cultural heritage of the Schuylkill River Valley.

The above approach to defining areas of focus will inform and provide direction for upcoming tasks in developing the Management Plan and EIS. These tasks include inventorying existing resources, identifying an interpretive framework and themes, formulating plan strategies and alternatives, and ultimately preparing the Management Plan and EIS with programs for implementation.
Sub-Appendix 1. List of Stakeholders Interviewed

Lynda Albright, Hamburg Borough Manager
Richard Boyd, Hamburg Borough Council
Jennifer Bowen-Frantz, Orwigsburg Historical Society, Schuylkill County Coalition of Historical Societies and Museums
Barbara Cohen, Executive Director, Phoenixville Area Chamber of Commerce
Tom Daly, National Center for the American Revolution
Jane Davidson, Chester County Heritage Preservation Coordinator
Paul Decker, Valley Forge CVB
Connie Delsignore, Reading-Berks CVB
Dave Donlin, Schuylkill County Chamber of Commerce
Jerry Enders, Jerry’s Classic Cars & Collectibles Museum, Pottsville
Jim Fairchild, Pottstown Economic Development
Dale Freudenberger, Market Towns Manager, Delaware & Lehigh National Heritage Corridor
Ed Grusheski, General Manager for Public Affairs, Philadelphia Water Department, Project Director, Water Works Interpretive Center
Micah Gursky, Tamaqua Borough Council, Legislative Assistant to Rep. David Argall
Joseph Hoffman, Senior Conservation Specialist, Berks County Conservancy
Jerry Johnson, Berks County Conservancy
Glenn Knoblauch, Executive Director, Berks County Planning Commission
Jim Lewars, Administrator of the Daniel Boone and Conrad Weiser Homesteads
Dale Mahl, Tri-County Chamber of Commerce
Mark Major, Schuylkill County Tourism Bureau
Mary Lou McFarland, President, Conservancy of Montgomery County
Pat McKinney, Environmental Education Coordinator, Schuylkill Conservation District
Christine McNeil, East Vincent Township Supervisor
John McPhee, Phoenixville Foundry developer
Thomas Muldoon, Philadelphia CVB
Steven Nelson, Deputy Chief Operating Officer, Montgomery County
Thomas Palamar, Pottsville City Administrator
Barbara Pollarine, Valley Forge National Historical Park
John Randolph, Schuylkill River Development Council
Mark Scarbinsky, Schuylkill County Economic Development Director
Douglas Seiler, Chairman, Greater Norristown Corporation
Forrest Shadle, Schuylkill County Commissioner
Tami Jo Shimp, Senior Conservation Specialist, Berks County Conservancy
Ann Smith, Director of Watershed Programs, Pennsylvania Environmental Council
Gary Smith, Chester County Economic Development Corporation
Kay Smith, Manayunk Development Corporation
Ken Smulligan, Tamaqua Borough Council
Patrick Starr, Executive Director, Pennsylvania Environmental Council
Jesse Walters, Chester County CVB
Cathy Wegener, Superintendent of Interpretive Services, Berks County Parks and Recreation Department
Linda Yulenavage, Tamaqua Downtown Manager
Sub-Appendix 2. March 2002 Public Meeting Comments

Meeting #1
Lloyd Hall – Philadelphia
March 19, 2002

Resources

- **Livable communities along the river:** Communities that respect natural and cultural resources. What is missing from these communities to enhance quality of life? Can be brought by the heritage program
- **Fairmount Park:** Centennial site, recent model, historic mansions. The park could benefit from heritage tourism if people knew these resources exist
- **Schuylkill River boating:** A regatta venue, generates economic activity. Boathouses themselves are a resource
- **The River:** Scenic value and management as a resource (e.g., pools)
- **Major transportation corridor:** Will tie into the East Coast Greenway. A tremendous transportation resource threatened by several major projects
- **Physical and recreational resources:** Restoration as center of commerce in Manayunk. East Falls Master Plan and Zoning Overlay. “Urban gateway” – build on waterfront, have front door on river. Connect to more active uses on the River and link to communities down the river. East Falls relates to Civil War Heritage – a way to get people from the City to see this. Also – relationship to Fairmount Park; inappropriate construction of gas stations along River in East Falls
- **Professionals:** More professionals that work in heritage/resource management than anywhere else in PA – are an organizational/people resource

Cultural resources

- **The River:** One of the difficulties of the 1995 Management Action Plan was its broad focus. Need to focus on the River and the river bank

Diversity of professional organizations

Diverse ethnic heritage: Needs to be promoted, has potential in telling story

Issues

- **Visibility and marketing**
- **Focus:** If plan doesn’t focus it will end up being “mush.” Carefully choose resources
- **Coordination:** Every community can’t have one of everything. Provide context for doing different things in different communities so they aren’t competing
- **Education:** Need to educate municipalities and individuals along the River. What are the benefits? Need to put a $ value on it
- **Threats:** Conversion of natural resources to the built environment
- **Economic return:** How do you generate more $ from the $10 million in federal funds? Need to indicate economic return
• **Environmental focus** on things such as non-point pollution
• **“Choking on success”?** An issue in other tourist areas, here we have towns that are lived in. Need to address the transportation system. Can be a reason to help make the Schuylkill Valley Metro happen. Help create a critical mass of activity to generate metro, trails, creative parking solutions. Also, information on transportation needs to be disseminated
• **Coordination:** The large number of jurisdictions and organizations at multiple levels are hard to understand. The issue of coordination needs to be addressed

**Benefits**
• **Funding:** Funding for greenway creates larger benefits
• **Tourism/awareness of historic resources:** Fairmount Park has infrastructure in place. Provides opportunity to tap into larger tourism market
• **Regional benefits:** Focus in urban communities where stations are to be located because Metro is most important to the region. Diverts attention away from greenfield development
• **Quality of life:** Provides quality of life for residents. “Polish the gems.” Just knowing the River, the resources are there enhances quality of life
• **Continuation of programming**
• **Education:** Get children to be good stewards. Set a good example for the next generation, leave them a legacy
• **Create a better system:** Better quality of life for children, residents, including business investment
• **Sustainable communities**
• **Enhance economic health:** Provide framework of economic tools that would benefit communities up and down the River. Tools they can work with to allow investment

**Meeting #2**
Montgomery County Community College West Campus – Pottstown
March 20, 2002

**Group #1**

**Resources**
• Preserve natural resources of river
• Protect, preserve, and interpret historic resources
• River is the backbone into which tributaries feed. Each tributary has own identity
• Historic preservation/natural resources/open space
• Balance of natural & built/river can redefine communities (common values)
• Old Morlatton (Douglassville)
• Heritage Area can raise visibility of individual resources and market them all together
• Diversity of people was the muscle of the industry
• Combat sprawl
• Small river towns as tourist destinations
• How we deal with all resources/community on river/education
• Development in flood plains
• Monocacy and other creeks
• Lack of awareness of resources/heighten civic involvement
• Schuylkill River project (desilting basins)
• People

Issues
• Funding
• How do you deal with too many visitors
• This should create excitement
• Volunteer coordinator
• Marketing strategy for river towns
• Out-of-state waste
• Integrating state and federal plans
• Balancing development/open space resources
• Integrating business community
• This is a positive EIS
• Education
• Economic development
• Quality of life
• Mitigate overuse
• Economic impact analysis
• Trail issues – privacy, security concerns
• Interagency coordination
• Water quality/quantity
• Consistent signage (interpretive/directional)

Benefits
• Impact of individual actions
• Benefits communities through economic development/preservation/tourism
• SHA communities eligible for other program funding
• Break into sub-areas
• Connects Pottstown & Norristown
• River connects
• Creates identity
• Trail system (interstate/secondary trails) physically linked
• Educate new neighbors
• Sense of place
• Organizations working together will benefit
• Transportation system
• Sense of civic involvement/awareness
• Public relations campaign
• Plan has to have vitality/transcend the number of pages

**Group #2**

**Resources**

• Historic resources
• Hopewell Furnace
• Hawk Mountain
• Norristown riverfront
• Montgomery Co. Farm Park/Stoney Creek Trail
• Elmwood Park trail link
• River buffer zones
• Iron Stone & Manatawny Creek Fishing Access
• River cliff area view sheds
• Coal siltbeds as parks
• Opposite Veterans Cemetery at Valley Forge
• Historic Resources – Iron & Steel Heritage Theme
• Variety of landscapes
• Railroad sites (Reading Co.)
• River & trails system
• Character of area
• Solitude
• Viewsheds
• Distribute impact and use
• Scenic Schuylkill Canal and historic structures
• Educational potential to people who live here
• Look beyond the county lines
• Architecture of the area: log houses to stone, covered bridges, churches, canal, Monacacy Hill
• Streams influenced colonial life(streams as natural aspect
• Water quality/quantity
• Diversity of wildlife habitats
• Frick’s Lock Village/section of canal
• Parkerford Tavern

Issues
• Where you could create historic districts
• Heritage district creation
• Native American sites and settlements
• Environmental resource incentives
• A teaching resource center
• Working with existing sites or relocates site if in the way of development
• Education aware
• Increased traffic
• Reorganize need for balance between natural beauty and need for infrastructure
• Sprawl/slow speed of sprawl/pressure on the resources
• Integrate the themes of resources (historic)
• Inclusion of ethnic communities (large numbers)
• Cooperation among resources in education
• Encourage regional and other planning agencies
• Think outside the box in putting together partnerships to balance initiatives based on historical, natural, and cultural (Together)
• A section of suggestions for economic-based initiatives for communities (example: teach citizens to fix up older historic homes)
• Metro rail as threat to trail, is it a threat?
• Unified development plan for uninterrupted stream bank (by development)
• Differing ethnic communities drawn into the plan process
• Tell a story (people, places, things)
• How do you enjoy this river – 1/2 day trips, sub-themes of history, geography
• How could a unified approach to zoning work (inform on approaches)
• Provide guidance to local communities
• D.E.P. office in Norristown as a resource and part of the Schuylkill River
• Provide some help in managing and planning transportation corridors (all types)
• Education & interpretation provides good examples to those involved to value the resources
• Hospitality training to locals
• Make it user friendly (easy to use) – create interest
• Provide access (example: trout season and No Parking signs)
• Interconnected nature, history, culture, recreation
• Opportunities for crossing the river – links across the river – historic fords, walking bridges, water taxi, water trails
• Identify lost resources (example: Where were covered bridges, ferries, taxis?)
Summary of county and state open space acquisition programs
How do you acquire land – how do you go about acquisition if you don’t have it
Townships are reactive vs. proactive
Cooperative planning with municipalities – How to do it?

Benefits
- Benefits matrix of good/better/best practices
- Identify areas for potential use
- Get historic districts on National Register
- Give a framework to make decisions (good/better/best)
- Label onto a larger area – not just focus on political boundaries
- Opportunity for recreation in densely populated areas
- Enhances the value of Norristown
- Plan can identify opportunities for a healthy revitalized community repeated up/down the corridor
- Opportunity to raise self awareness of each area’s sense of identity
- Increase owners’ sense of place
- Economic development turned back into the community from state and federal funding through partnerships with local entities – funding rolled back into the communities – local business, non-profits
- 1% for the Schuylkill River Program impact fee on development
- Rename the river
- Opportunity to look at river as a whole with the Sojourn
- Smaller groups benefit as well as provide benefit
- Family life improvement
- Keep the money in your community (example: Skippack Village)
- Benefits is key to information delivery – multiple venues/methods and creativity in delivering information
- We need industry and an area for industry to prosper

Group #3

Resources
- Agricultural resources
- Underground Railroad and Pine Forge
- Oley
- The River & tributaries
- Historical resources
- Schuylkill Navigation System
- Desilting basins
• Linkages
• Urban centers, towns
• Industrial heritage
• Recreation
• Architectural qualities
• Grist mills
• Woodlands/wetlands
• Railroads, transportation
• Archeological resources
• Scenic roads
• Trails
• Mining
• Bridges
• Wildlife habitat
• Museums
• Education facilities
• Dams/fish ladders
• Horticultural resources
• Folklore, culture
• Betzwood studios
• Scenic Vistas (Valley Forge NHP hill)
• Sanatoga Village
• Ringing Rocks
• Skyline Drive/Pagoda
• Neversink Mountain
• Frickstown Village
• Morlaitan Village
• Ontelaunee Dam, Maiden Creek
• Manatawny Creek
• Lock 60 Mont Clare

Issues
• Water intake, public water
• Pollution of waterways
• River management
• Traffic
• Communication with key stakeholders (land owners)
• Land preservation/industry
• Open space
• Public awareness
• Flood control
• Support Schuylkill Metro
• Coordination, cooperation, communication among groups, plan
• Sharp focus
• Enhance quality of life
• Recognition of past
• Engage private sector
• Economic benefits
• Measurements of success

Benefits
• Nature trails
• Economic development of municipalities & region
• Could support regional transportation system
• Address water issues
• Regional/local water resources (Delaware River)
• Refocuses attention to river
• Health benefits
• Revitalize older downtowns
• Historic preservation
• Focal point for Environmental Education
• Regional Cooperation
• Regional planning catalyst
• Living classroom – environmental, historical

Meeting #3
Quality Inn – Pottsville
March 21, 2002

Group #1

Resources
• Hawk Mountain
• Pioneer Tunnel
• Port Clinton
• Auburn
• Churches
• Bartram Trail
• Tamaqua Train Station
• Schuylkill Valley Heritage Trail
• Tamaqua Visitor Center
• Appalachian Trail
• Water Trail
• Coal heritage
• “Molly Maguire” story
• Labor history (Shenandoah, St. Clair)
• Interstate 81 – 10,000,000 vehicles per year
• Mining heritage
• Vietnam Memorial, Mothers’ Memorial, Firemans’ Memorial
• Transportation history
• Unique structures (bridges, tunnels, Mahanoy Plane)
• Tumbling Run – maintain water levels
• Timber (used for ship building)
• Charcoal used in iron making
• Railroad spurs
• Geology (conglomerate rock & fossils)
• Underground railroad
• Potential for fishing
• Port Carbon – 1st canal
• Watershed organizations
• Outdoor recreation
• Large tracts of public land
• Historical building stock
• Murals in Pottsville – art/culture
• PA Natural Diversity Index

Issues
• Identification and prioritization of recreation projects
• Adaptive reuse of old buildings (teach trades)
• Financial return on investment
• Fair allocation of funds/know grant procedure
• Get local government buy-in (support)
• Reuse of old structures/materials
• Out-of-state waste
• Local codes/zoning
• Marketing promotion
• Schuylkill County portion is unique and identifiable
• Tell coal story in cooperation with other heritage areas
• Water quality and aesthetics
• Small business success stories – need advocate/technical assistance/progress fund & business development
• Invasive plants (knotweed/stiltgrass)
• Safety/protection on highway system

Benefits
• Pride, multicultural, recreation/hiking/biking
• Stabilize county’s population
• Jobs
• More on-water activity/community celebrations
• Clean up river
• Awareness of Schuylkill County – national recognition
• Diversify economy/more than just industrial gas
• More opportunities/reasons to stay
• Buildup of self-esteem
• Create identity
• Schuylkill County fueled industrial revolution (part of bigger story)

Group #2

Resources
• Old St. Nicholas Breaker
• Schuylkill River & uses, potential
• Land Resources – woodland/farmland
• Rail heritage
• Schuylkill Canal
• Anthracite mining heritage
• Yeungling Brewery
• Industrial/coal/labor heritage
• Ethnic heritage/festivals/churches etc.
• Canal locks
• Outdoor recreation
• Appalachian Trail
• Historical societies & museums for profit & non-profit
• Architecture
• New St. Nicholas Breaker
Issues
- Economic incentive programs
- Coordination between various profit & non-profit in place, investments to support communication, circulation
- Investment opportunity has to be managed so it does not destroy resources – set up "buffer zones"
- Grant writing assistance to small organizations (administrative support)
- Need to complete projects
- Heritage rehabilitation financial assistance
- The river belongs to the people
- Establishing a clear/unified identity
- Acid mine drainage
- Sewage treatment
- Labor/management interaction
- Need for county land use plan
- Adequate facilities for river users
- Getting our share of allocations

Benefits
- Pride in community
- Opportunities to retain youth
- Increased water quality (benefit to visitors & region)
- Economic opportunity
- Tourism as economic tool increasing awareness as mean of attracting people to area
- Creating diversified economy opportunity to preserve heritage/educational tool
- Restore, build, preserve, protect heritage
- Maintain quality of life
- Maintain quality of place

Group #3

Resources
- Hiking trails (numerous)
- Historic sites, ethnic & cultural heritage
- Special interest (examples: canals, railroad, physical features)
- Open space
- Cleanliness of the river
- Bridges
- Fishing & hunting – outdoor recreation
- Natural resources
- Hawk Mountain
- Tus. State Park
- Locust Lake
- Water/river is keystone of entire watershed
- Richness of education opportunities (laboratory for classroom)
- Aesthetic & natural beauty (examples: fall foliage, visual landscape)
- Cleanliness of it
- Mining heritage
- Depletion of the dams
- Geological resources
- Deer Lake, Palo Alto, St. Clare, McAdoo, Pottsville Conglomerate, Broad Mountain (2 miles wide at the top – Susquehanna from the Schuylkill)

Issues
- Loss of recreational resources (example: dams)
- New and old pollution – can anything be done to keep clear and safe (actively concerned)
- Fund availability – access to these funds
- Continuation/completion of the trail
- Inventory of all the “Treasures” that exist
- Education re. the Heritage Corridor – marketing, pamphlets
- Cleaning up the water itself (raw sewage vs. runoff)
- Inventory of not only historic resources but natural resources as well
  - Kings Highway
  - Centre Turnpike (“end of civilization”) – Markers near YWCA in Pottsville, markers near Deer Lake on right hand side
- Loss to development
- St. Nicholas Breaker – saving sites such as these – how to preserve these sites?
- Better testing methods of the Schuylkill & water quality
  - Testing for heavy metals and other pollutants, not just pH
- Identify old areas of the canal – restore, uncover and use as recreation sites
- More scenic photography (visual beauty)
- Partnerships between organizations & groups (cooperation, coordination, open dialog, more discussion, open exchange of ideas)
- Halting developmental sprawl
  - Value our open space, farmland
- Cleaning abandoned mines correctly (acid mine drainage)
- Assistance to museums (make more resources available to them)
- Help promote (marketing) museum with the intent to bring more people to the area
Benefits
- Options for children, family activities
- Increase community involvement
- Stimulate activities that encourage tourism for both young and old
- Coordinator in each county facilitating/taking advantage of the existing resources that provide a constant schedule of activities, events and programs
- Stimulating the continued cleanup of the rivers
- Start with the water – clean the banks, clear out the trash
- Major economic benefits (lodging, restaurants, biking and hiking equipment) – seed for tourism (catalyst to encourage economic growth)
- Access to the areas
- Places that house artifacts are to be preserved
- Drawing from the diverse historical and cultural heritage to attract a diverse group of tourists
- Many firsts – e.g., first retail vehicle
- Genealogy, ancestral heritage (Cemetery) – Historic Society has been working on a brochure to help trace genealogical past
- Christmas (resource)
- Opportunities to learn from each other up and down the river
- Coordination
- Focus on the long term, future generations
- Ethnicity → food
- Class reunions → pride in one’s past
Sub-Appendix 3. Schuylkill River Valley National Heritage Area Task Force Members

Laurie Actman, Greater Philadelphia First
Sheila Bello, Montgomery County
Jennifer Bowen-Frantz, Orwigsburg Historical Society, Schuylkill County Coalition of Historical Societies and Museums
Kate Damsgaard, French & Pickering Creek Conservation Trust
Randy Frey, French Creek State Park
Cyndie Fuhrer, Berks County Conservancy
Micah Gursky, Tamaqua Borough Council, Legislative Assistant to Representative David Argall
John Hoekstra, Green Valleys Association
Tracy Kay, Schuylkill Center for Environmental Education
Bob Layman, North Coventry Township
Cynthia Lenhart, Hawk Mountain Sanctuary
Jim Lewars, Administrator of the Daniel Boone and Conrad Weiser Homesteads
Valerie MacDonald, Shenandoah Chamber of Commerce
Dale Mahl, Tri-County Chamber of Commerce
Bill Manner, Pennsylvania Department of Environmental Protection
Christine McNeil, East Vincent Township
Barbara Pollarine, Valley Forge National Historical Park
Dorothy Pulcher, PECO Energy
Bill Sanders, Hopewell Furnace National Historic Site
Douglas Seiler, Chairman, Greater Norristown Corporation
Ann Smith, Pennsylvania Environmental Council
Gail Tomlinson, Waterworks Interpretive Center
Cathy Wegener, Superintendent of Interpretive Services, Berks County Parks and Recreation Department

Steering Committee
Jane Davidson, Chester County Heritage Preservation Coordinator
Dennis DeMarra, Regional Recreation and Park Advisor, Pennsylvania Department of Conservation & Natural Resources
Joseph DiBello, Manager, Stewards & Partnerships, National Park Service
Mark Major, Schuylkill County Tourism Bureau
Kay Smith, Manayunk Development Corporation
Michael Stokes, Assistant Director, Montgomery County Planning Commission
Dixie Swenson, Executive Director, Schuylkill River Greenway Association
Sub-Appendix 4. List of Agencies to Which Letters Were Sent

The Honorable Robert Borski, U.S. House of Representatives
The Honorable Robert Brady, U.S. House of Representatives
Robert Callegari, U.S Army Corps of Engineers – Planning
John Carpenter, U.S. Department of Housing & Urban Development
Carol Collier, Delaware River Basin Commission
John Coscia, Delaware Valley Regional Planning Commission
Anthony Cunningham, Office of U.S. Senator Arlen Specter
William DeVito, Office of U.S. Senator Rick Santorum
Joseph DiBello, National Park Service
The Honorable Mike Doyle, U.S. House of Representatives
The Honorable Phil English, U.S. House of Representatives
The Honorable Chaka Fattah, U.S. House of Representatives
Tom Ford, Pennsylvania Fish and Boat Commission
Paul Gaudini, U.S. Army Corps of Engineers – Planning
Don Gephart, Pennsylvania Department of Conservation & Natural Resources
Dr. Brent Glass, Pennsylvania Historic and Museum Commission
Robert Guami, U.S. Environmental Protection Agency, Region III – Brownfields
Gerard Hertel, U.S. Forest Service
The Honorable Joe Hoeffel, U.S. House of Representatives
The Honorable Tim Holden, U.S. House of Representatives
Donald Kerns, U.S. Postal Service
Barry Leatherman, U.S. Army Corps of Engineers
Carol Lee, Pennsylvania Historic and Museum Commission
Bill Manner, Pennsylvania Department of Environmental Protection
Thomas Majusiak, U.S. Federal Emergency Management Agency, Mitigation Division
Jay McGee, Pennsylvania Department of Transportation
Natural Resource Conservation Service, Community Assistance & Resource Development
Division
Pennsylvania Department of Environmental Protection, Southern Regional Office
Joseph Piotrowski, U.S. Environmental Protection Agency, Region III
The Honorable Joseph Pitts, U.S. House of Representatives
Marie Rust, National Park Service
Flavia Rutkowski, U.S. Fish and Wildlife Service, Northeast Region
The Honorable Richard Santorum, U.S. Senate
The Honorable Arlen Specter, U.S. Senate
Glen Stevens, U.S. Army Corps of Engineers
Tom Stolle, U.S. Environmental Protection Agency – Brownfields Economic Development
Initiative
Barbara Stratton, U.S. Army Corps of Engineers
U.S. Coast Guard – 5th District
U.S. Department of Transportation, Federal Highway Administration
C. Lee Ware, U.S. Army Corps of Engineers – Planning
The Honorable Curt Weldon, U.S. House of Representatives
Joseph Yarborough, Pennsylvania Department of Community and Economic Development
MARKET ANALYSIS
May 2002

Introduction

This report serves as a market analysis of the Schuylkill River Valley National Heritage Area. It examines a number of facets of the market for heritage tourism in the heritage area’s five counties, as well as the region as a whole. The findings of this market analysis will help define opportunities for and constraints to future tourism and economic development efforts in the heritage area.

The report is divided into four sections. The first is an assessment of visitor services and infrastructure in the heritage area. The second section examines regional socioeconomic trends, in order to provide some larger-scale perspective. The third section analyzes the regional market for heritage tourism, including reviews of both resident and tourist markets. Finally, the fourth section summarizes the general findings of the market analysis and identifies issues for further exploration.

The Schuylkill River Valley National Heritage Area is composed of the river’s watershed within the Counties of Schuylkill, Berks, Chester, Montgomery, and Philadelphia. For the purposes of the analysis, this report analyzes market and socioeconomic information at the county level, for which data is readily available. Although county boundaries do not correspond to the boundaries of the heritage area (large portions of Philadelphia, Schuylkill, and particularly Chester County are located outside of the heritage area), demographic and economic data are most readily available at the county-wide level. Moreover, as described in Section 4, the resident population of the five counties forms the core audience for heritage tourism in the region and thus the county level is the appropriate level of analysis.

1. Assessment of Visitor Services and Infrastructure

The Schuylkill River Valley Heritage Area is, in comparison with other, more rural heritage areas, quite accessible. In addition to air service to Philadelphia and Reading and train service to Philadelphia, the five county region is served by four major Interstate highways (76, 78, 81, and 95), a number of Interstate branch highways (176, 276, 476), several major U.S. highways (202, 222, 422), and a number of state trunk highways (61, 73, 100, 724). In fact, each of the five counties has at least one interstate highway within its borders. The region is also well served by trails, including the emerging Schuylkill River Greenway, the Appalachian Trail, and the Horse-Shoe Trail.
Among the five counties, Schuylkill County is the least accessible and the least developed in terms of tourism infrastructure. Although the county is framed by Interstates 78 and 81, many of its communities are arranged along roads leading off from State Route 61 and can be difficult to reach. However, the more difficult access may be an asset for a certain type of tourist who is looking for a more adventurous experience. The County’s winding roads also present drives that, while not always “scenic” in the traditional sense, provide wonderful views of the landscape of anthracite coal country.

At the present time, the four counties besides Schuylkill all have very significant tourism industries, with well-defined anchor destinations in each county. The points below briefly summarize the magnitude of the anchor destinations in each county and characterize how they relate to visitor infrastructure.

- Philadelphia is the center of tourism in the region, featuring Independence Hall and the Liberty Bell, which draw millions of visitors each year. In addition, Philadelphia has many popular museums, including the Franklin Institute and the Philadelphia Museum of Art. Many visitors also come to Philadelphia simply to walk around Center City and its historic sites. The City is knitted together by an extensive public transit system and a network of expressways and roads.
- Montgomery County’s tourism program is anchored by Valley Forge, which draws about two million visitors per year, and the King of Prussia Mall, the largest shopping mall in Pennsylvania. While much of Montgomery County has a substantial amount of visitor infrastructure, mainly along the Pennsylvania Turnpike, outlying portions of the county such as Pottstown are somewhat lacking in lodging and dining options for visitors.
- Chester County’s tourism program centers on Longwood Gardens, which draws about one million visitors per year, and the Brandywine Valley, which features many historic homes and sites. These attractions, along with most of the lodging and dining options in the County, are located south of the Pennsylvania Turnpike, many miles from the Schuylkill River and outside of the heritage area.
- The tourist attractions and visitor infrastructure in Berks County are mainly concentrated in Reading, with the Reading Outlets at the center of the experience. There are many individual attractions in the county’s rural areas, such as Hopewell Furnace, Kutztown, and Dutch Hex barns, but these locations are somewhat remote and lack visitor amenities.
- Schuylkill County does have a number of visitor attractions, notably the Yuengling Brewery, which draws about 60,000 visitors per year, and the Pioneer Tunnel Coal Mine, which draws over 40,000. However, on the whole the County lacks a distinct identity for tourism. It has relatively limited lodging, dining, or shopping options for tourists and many of its attractions can be hard to reach.

As the points above illustrate, the necessary tourism infrastructure (wayfinding, lodging, dining, retail, etc.) is somewhat lacking in portions of the heritage area. As a major city, Philadelphia does have a vast array of visitor services, as do the Valley Forge/King of Prussia and Reading areas. However, aside from those three locations, lodging, dining, and retail options are limited, even in more developed areas like Pottstown, Phoenixville, and
Pottstown. In more rural sections of the heritage area, lodging options for tourists are limited to low-budget motels, campgrounds, and a few small inns and bed & breakfasts. Thus additional lodging, dining, entertainment, and other types of businesses are needed in these areas to present a more complete tourist product.

Another consideration is the presently low visibility of the heritage area to residents and tourists alike. There are few visual indicators such as graphic images, wayfinding signage, or historic markers to indicate that a person is in the heritage area. A number of visitor center projects are in the works that will help raise the profile of the heritage area, including the Phoenixville Foundry in Chester County and the Schuylkill County Welcome Center along Interstate 81. The presence of the heritage area should be made known to visitors at these and other reception locations.

2. Regional Socioeconomic Trends

As previously noted, socioeconomic data are analyzed at the county level, using the five counties of the Schuylkill River Valley National Heritage Area as the area of analysis. Although the heritage area itself only includes portions of each county, with large sections of several of the counties outside its boundaries, socio-economic data is most readily available at the county-wide level. Furthermore, the resident population of the five counties forms the core audience for heritage tourism in the region.

The subsections that follow outline population and employment profiles and trends for the five heritage area counties.

**Population Trends and Projections**

The population of the five counties in the heritage area has remained relatively stable over the past 50 years, with a net gain of just 185,000 residents from 1950 to 2000, representing a compound annual growth rate of just 0.1 percent. By comparison, the Commonwealth of Pennsylvania’s annual growth rate from 1950 to 2000 was 0.3 percent and the United States growth rate was 1.2 percent. The region’s population in the 2000 Census was 3,225,122.

Going back further in history, it is apparent that 1970 was the peak of population growth for the region. In 1900, there were 1.86 million people living in the five counties, of whom 70 percent lived in Philadelphia. From 1900 to 1950, the region grew by a
one percent rate annually. This growth continued through 1970, when there were 3.31 million people living in the region. However, the population had shifted considerably, with just 59 percent of the region’s people living in Philadelphia in 1970. The City’s population began falling in 1950 from an all-time high of 2.07 million to 1.52 million in 2000.

As Philadelphia has declined in size, outlying areas like Berks, Chester, and Montgomery Counties have experienced significant growth. These three counties had just 394,000 people among them in 1900, but continued decentralization of the Philadelphia region caused them to increase to 768,000 people by 1950 and 1.56 million today—more than the present population of the City of Philadelphia. The only non-metropolitan county in the heritage area, Schuylkill, has experienced a steady population decline since its peak size of 235,000 people in 1930, at the height of the coal industry. By 2000, Schuylkill County had approximately 150,000 residents, its lowest Census total since 1880.

In the mid-1990s, the Pennsylvania State Data Center (PSDC) completed population projections at the county level for the entire Commonwealth. For four of the five counties, the projections of 2000 population were fairly accurate. However, for Montgomery County, the earlier projections were well below actual population growth; the suburban county continued to grow through the 1990s to a level of 750,000 residents, an increase of over 71,000 people from 1990. The PSDC’s projections only foresaw Montgomery County reaching 712,000 people by the year 2020, a number that has already been far surpassed. The table below summarizes these projections.

### Population Projections for Pennsylvania and Comparison with Actual Census Data

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<tbody>
<tr>
<td>Pennsylvania</td>
<td>11,882,842</td>
<td>12,281,054</td>
<td>12,241,488</td>
<td>12,407,523</td>
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<tr>
<td>Berks</td>
<td>336,523</td>
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<tr>
<td>Philadelphia</td>
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<tr>
<td>Schuylkill</td>
<td>152,585</td>
<td>150,336</td>
<td>152,271</td>
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### Annual % Change

<table>
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</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Berks</td>
<td>1.1%</td>
<td>0.9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Chester</td>
<td>1.4%</td>
<td>1.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Montgomery</td>
<td>1.0%</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>-0.4%</td>
<td>-0.5%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>-0.1%</td>
<td>0.0%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Regional Total</td>
<td>0.3%</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Source: Pennsylvania State Data Center; Economics Research Associates
Leaving aside actual 2000 Census figures for the moment, the PSDC projections for the region foresaw a modest growth rate of 0.1 percent per year. The projections were more aggressive for Berks (0.6 percent annually) and Chester (0.8 percent), but were offset by forecasted losses in Philadelphia and Schuylkill (both -0.2 percent), and a minimal gain in Montgomery of 0.1 percent. The total projected population of the region in 2020 was 3.23 million, a figure that has already been attained, due to the unexpectedly strong growth of Montgomery County.

As stated earlier, population in the region was historically concentrated in Philadelphia. In the other counties, population has not generally been centered on urbanized areas, with the exception of Reading, the second largest city in the region. Still, there are many historic “central cities” in the five-county area, most of which were at one time centers of manufacturing and/or transportation. These communities include Norristown and Pottstown in Montgomery County, Phoenixville in Chester County, and Pottsville and Tamaqua in Schuylkill County.

Similar to Philadelphia (and other urban areas around the country), these cities and boroughs have, by and large, seen declining populations over the past few decades. From 1970 to 2000, in fact, all of these communities (including Reading) lost population, as seen in the table below. However, the trend began to reverse in closer-in areas in the 1990s, with Norristown, Pottstown, and Reading all growing during the 1990 to 2000 period. However, boroughs in Schuylkill County (including Shenandoah, Mahanoy City, and other communities in addition to Pottsville and Tamaqua) continued to lose population in the 1990s.

### Population Change in Towns and Cities, 1970-2000

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Norristown</td>
<td>-1.0%</td>
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<td>0.2%</td>
<td>-0.7%</td>
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<tr>
<td>Philadelphia</td>
<td>-1.4%</td>
<td>-0.6%</td>
<td>-0.4%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Phoenixville</td>
<td>-0.5%</td>
<td>0.6%</td>
<td>-0.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Pottstown</td>
<td>-1.1%</td>
<td>-0.4%</td>
<td>0.0%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Pottsville</td>
<td>-0.8%</td>
<td>-0.9%</td>
<td>-0.2%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Reading</td>
<td>-1.1%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Tamaqua</td>
<td>-0.4%</td>
<td>-1.1%</td>
<td>-1.0%</td>
<td>-0.8%</td>
</tr>
<tr>
<td><strong>All Cities</strong></td>
<td><strong>-1.4%</strong></td>
<td><strong>-0.6%</strong></td>
<td><strong>-0.4%</strong></td>
<td><strong>-0.8%</strong></td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of the Census; Economics Research Associates
Characteristics of Population

Given the variation in the five counties of the Schuylkill River Valley National Heritage Area, population characteristics such as age, household composition, income, and educational attainment are very different from one county to another. The region also continues to grow and change, and many of the characteristics of the region’s population are different today from ten years ago. This sub-section examines population characteristics and how they have changed over time.

Age: Since 1990, the five-county region’s population has seen growth in just two of its six age cohorts—ages 45-54 and 5-17. These two cohorts have grown substantially over the past decade, largely due to the effects of the baby boom and “echo boom” generations. In 1990, the 45-54 age group only accounted for 10.0 percent of the region’s population, but by 2000 it had swelled to a 13.2 percent share. Similarly, the 5-17 age group boomed from 16.5 percent to 18.5 percent of the region’s population. At the same time, the middle cohort (ages 25-44) lost population, as did the age groups 55-64 and 65 and older.

Within the individual counties, a few age characteristics are notable. Philadelphia, as an urban center, has a high concentration of college-age people (18-24 years), but also has a surprisingly high concentration of younger children, with over 25 percent of its population being under the age of 18. The two suburban counties in the heritage area, Montgomery and Chester, have high concentrations of middle-age families, with more than 30 percent of each county’s population being between the ages of 35 and 54. Schuylkill County, the only truly rural county in the area, has a very high concentration of senior citizens, as nearly 20 percent of its population is 65 or older, but a dearth of younger families. Interestingly Berks County, a county that bridges suburban and rural areas, most closely follows the regional averages for age profile.
Households: Average household size is a population indicator that typically follows age profiles, as areas with more children typically have larger household sizes. Accordingly, Chester County, the county with the highest concentration of children, also has the region’s highest average household size of 2.65 persons. At the other end of the scale, Schuylkill County’s average household size is the smallest in the region, at just 2.36 persons. The regional average in 2000 was 2.52, down somewhat from the 1990 average of 2.58, reflecting a national trend of smaller households.

The Census also maintains statistics on types of families. Much is made of the findings from the 2000 Census that single-person households now outnumber married-couple households with children. The five heritage area counties are no exception, as their combined household profile is comprised of 29 percent single-person households and just 19 percent married-couple households with children under 18. There are many more married-couple households without children, however: 25 percent of the region’s households fall into this category. Among non-married couple households, which comprise 20 percent of the region’s households, about half have children under 18.

Looking at county household profiles, Philadelphia is distinct from the other counties. The City has the highest concentration of single-person households at 34 percent, and the lowest concentration of married-couple households at just 32 percent, compared with the regional average of 45 percent. Accordingly, Philadelphia has a very high concentration of non-married couple households—28 percent, compared with the regional average of 20 percent. In Chester and Montgomery Counties, by contrast, over 25 percent of all households are married couples with children under 18.
**Income:** As of May 2002, income data from the 2000 Census has not yet been published, so 1990 Census data is used as a proxy. In 1990, the average per capita income in the five-county region was $15,530. As with age characteristics, income varies from county to county. The two suburban counties (Chester and Montgomery) had the highest income levels, with per capita averages of over $20,000 and median household income levels over $40,000. Philadelphia and Schuylkill Counties had the lowest income profiles; per capita incomes in these counties were below $12,100, and median household incomes were in the $24,000 range. Berks County, again the “bridge” county for the region, had an average per capita income of $14,600 and a median household income of $32,000.

**Educational Attainment:** As with income, educational attainment figures from the 2000 Census are not yet available, so 1990 figures are used. Overall in 1990, 72 percent of the region’s residents over the age of 25 were high school graduates and 21 percent were college graduates. Chester and Montgomery Counties had the highest attainment levels: over 80 percent high school graduates and over 30 percent college graduates. Berks County was again near the region’s average, with high school and college graduation levels of 70 and 15 percent. Philadelphia had a low level of high school graduates (64 percent), but a decent level of college graduates (15 percent), a profile common to large cities. Finally, Schuylkill County’s high school graduate percentage is fairly solid at 68 percent, but its college graduate percentage is a low eight percent.
Employment Trends
Examining regional employment back to 1970, it is clear that the economy of the Schuylkill Valley has experienced a great deal of change despite only posting modest growth in terms of the number of jobs. Overall, from 1970 to 1999, the region added about 212,000 jobs, an increase of 12.5 percent, with a total of 1.91 million full-time wage and salary jobs in the five counties as of 1999. However, the balance of jobs shifted substantially, with the region transforming itself from a manufacturing-based economy to a service-based economy.

In 1970, there were 464,000 manufacturing jobs in the five counties, representing 27 percent of all employment in the region. By 1999, this number had decreased to just 238,000 jobs, for a share of only 12 percent. The greatest impact was felt in Philadelphia, where there were 242,000 manufacturing jobs in 1970 but only 59,000 in 1999, a 76 percent decline. Schuylkill County also experienced significant decline of its manufacturing industries, losing about 10,000 of its 26,000 jobs in this sector from 1970 to 1999, a 39 percent decrease. The other three counties all lost manufacturing jobs as well, but at lower rates than Philadelphia and Schuylkill.

Manufacturing was not the only declining sector in the region, as there were also losses in the mining, transportation, and wholesale trade sectors as well. However, losses in these industries were not felt region-wide. The mining industry is mostly concentrated in Schuylkill
and Berks Counties, each of which lost more than 50 percent of its mining jobs from 1970 to 1999. The transportation and public utilities sector did decline region-wide, but actually grew in Berks, Chester, and Montgomery Counties. However, gains in these counties were offset by a 45 percent job loss in Philadelphia. Wholesale trade followed a similar pattern, as Philadelphia lost 62 percent of its wholesale jobs from 1970 to 1999, but the other counties all grew.

The big gainer in the regional economy, as in much of the United States, was the services sector. From 1970 to 1999, this sector more than doubled, growing from 354,000 jobs (21 percent of the regional total) to 735,000 jobs (38 percent). Even Philadelphia, which saw all of its other major industries decline, posted substantial growth in these industries, adding 115,000 service jobs during the three decades. These industries grew the most in Montgomery (217 percent gain) and Chester (362 percent gain), where office space construction has been very strong. In 1970, these two counties had just 89,000 services jobs; by 1999 they had over 300,000 such jobs, demonstrating how the regional economic balance has shifted.

Unemployment in the heritage area counties is fairly high, with a February 2002 level of 6.1 percent, up from 4.9 percent in February 2001. While Schuylkill County has the highest unemployment rate in the region of 8.6 percent, its rate has remained steady over the past year. Berks and Montgomery Counties have each seen unemployment rise substantially from 4.9 and 3.3 percent in February 2001 to 6.8 and 4.8 percent in February 2002. In Philadelphia, unemployment was 7.3 percent in February 2002, up from 6.4 percent in February 2001.

### Unemployment Rates, 2001-2002

![Unemployment Rates Chart]

#### 3. Regional Heritage Tourism Market

A number of different studies have been completed in recent years attempting to document and quantify the magnitude and economic impact of tourism in Pennsylvania. The following studies have been evaluated for this market analysis because they directly relate to either the geographic area of interest or to heritage tourism:
The 2000 Travel Year: Philadelphia, and Profile of Visitation to the City of Philadelphia vs. Other Four Counties, prepared by Longwoods International for the Greater Philadelphia Tourism Marketing Corporation

1999 Pennsylvania Economic Impact Report, prepared by D.K. Shifflet & Associates for the Pennsylvania Department of Economic and Community Development

Pennsylvania Heritage Tourism Study, prepared by D.K. Shifflet & Associates for the Pennsylvania Department of Conservation and Natural Resources

Statistics from these three studies help paint a picture of the heritage tourist and the market for heritage tourism in the Schuylkill River Valley National Heritage Area. This section reviews findings from the three studies, in order to help define the regional market for heritage tourism.

Studies by Greater Philadelphia Tourism Marketing Corporation

The Greater Philadelphia Tourism Marketing Corporation (GPTMC) conducts an ongoing tourism research program and generally has its consultant update its data every year. These studies profile visitation to Philadelphia and four surrounding counties: Bucks, Chester, Delaware, and Montgomery. Although two of these four other counties are not in the Schuylkill River Valley National Heritage Area (and Bucks County is in the Delaware & Lehigh Heritage Area), it is still important to understand visitation patterns to Philadelphia and its nearby counties.

In 2000, business and leisure visitors made approximately 11.3 million trips to the Philadelphia region, up slightly from the 1999 total visitation of 10.7 million and the 1998 total of 10.3 million. In 2000, 25 percent of all visits to the area were discretionary leisure visits, 45 percent were by those visiting friends and relatives (known as VFRs), and 30 percent were business trips. This visitation profile has remained relatively steady over the past few years.
Among leisure visitors, the most popular activities in the Philadelphia area involve historic areas and historical attractions, with over 30 percent of all travelers visiting such places. Other popular sightseeing destinations are small towns/villages (29 percent), rural farming areas (25 percent), historic houses (24 percent), architecture (19 percent), and national/state park (16 percent). Shopping is by far the most popular entertainment activity, as 55 percent of visitors go shopping. In fact, the most popular destination of any type in the four surrounding counties is the King of Prussia Mall, with Valley Forge a distant second.

Of all visitors to the region, 37 percent named Philadelphia as their primary destination, with 33 percent visiting the other four counties, 15 percent going elsewhere in Pennsylvania, and 15 percent going to another state. The vast majority (78 percent) travel in their own vehicles, with 19 percent coming by airplane, and five percent by bus or train. The average length of trips for all visitors to the region is 4.1 nights.

Visitors to Philadelphia are much more likely (47 percent) to stay in hotels than are all U.S. travelers. They are also more apt to stay with friends or family than other U.S. travelers (21 percent vs. 11 percent for the U.S. as a whole).

Compared with all travel in the United States, visitation to Philadelphia is not affected much by seasonality. Nationally, 33 percent of travel occurs in the summer, 28 percent in the spring, 20 percent in the fall, and just 19 percent in the winter. In the Philadelphia region, the breakdown is 28 percent in the summer, 29 percent in the spring, 23 percent in the fall, and 20 percent in the winter.

Pennsylvania was the most popular state of origin for those visiting the area, with 19 percent of visitors coming from in-state. New York was a close second at 17 percent, followed by Virginia (9%), New Jersey (7%), and Maryland (7%). Among metropolitan markets, the New York metro area accounted for 19 percent of visitors to the region, with the Washington/Baltimore area representing 12 percent of visitors and no other region accounting for more than three percent.

Philadelphia attracts a high percentage of younger visitors than the U.S. as a whole, as 30 percent of visitors to Philadelphia are between 25 and 34, compared with 24 percent nationally. By contrast, Philadelphia does not do well at attracting older visitors, with just 17
percent of its visitors being over the age of 55, compared to 25 percent of all travelers nationally. The average age of visitors to Philadelphia is 41.0, far lower than the national average of 43.6.

The points below summarize other demographic characteristics of visitors to the Philadelphia area:

- **Race:** Philadelphia is a popular destination for minority travelers, with 25 percent of visitation to the region coming from African American travelers. While visitation from Hispanics is not as strong (four percent), it still represents nearly half a million visits per year.
- **Marital Status:** The region gets a lot of visitation from singles, with 40 percent of visits from those who have never been married, compared with just 22 percent of all U.S. visitors.
- **Size of Traveling Party:** Traveling parties to Philadelphia are typically not very large, with 32 percent consisting of one person and another 29 percent being two people. However, 11 percent of visitors come in parties of five or more, a figure greater than the national average of 10 percent.
- **Children in Household:** Just 29 percent of visitors to the region have children in their households. Those with children are more likely to have older kids; 35 percent of children in these households are between the ages of 13 and 17, another 35 percent between six and 12, and 30 percent under the age of six.
- **Household Income:** The majority of visitors to the region come from households earning more than $50,000 per year, with 35 percent earning more than $75,000 and another 19 percent in the $50,000-74,999 range. Just 17 percent come from households that earn less than $25,000.
- **Education:** Visitors to the region are generally fairly well educated. Nineteen percent did not at least attend college, another 29 percent started but did not finish college, 32 percent are college graduates, and 20 percent have graduate degrees.

Other research by the GPTMC has documented spending by visitors to the region. In 1999, the most recent year tracked, visitors to the region spent $2.6 billion, of which half was spent by business visitors, and one-quarter each was spent by leisure visitors and VFRs. Business visitors spent a great deal more than the other two groups: an average of $371 per trip compared with $207 for leisure visitors and $140 for VFRs.

The GPTMC has also conducted research into how visitors to Philadelphia differ from visitors to the suburban counties. The
biggest difference is that 58 percent of visitors to suburban counties are visiting friends and relatives, compared with just 26 percent of visitors to Philadelphia. Not surprisingly, just 21 percent of suburban visitors come for business, compared with 43 percent of city visitors. An outgrowth of this profile is that suburban visitors are far less likely to stay in hotels than are city visitors. Just 51 percent of suburban visitors stay in paid accommodations, compared with 83 percent of city visitors.

1999 Pennsylvania Tourism Economic Impact Report
This report measures the magnitude of tourist activity and tourist spending on a county-by-county basis for the entire Commonwealth of Pennsylvania. As such, it is a very valuable resource for measuring the existing level of tourism in the five counties of the heritage area.

In 1999, domestic tourists\(^1\) in Pennsylvania accounted for $18.04 billion in direct economic impacts. Of this total, about $4.05 billion or 22.4 percent was spent in the five heritage area counties. Philadelphia, as expected, drew the most activity of the five counties, with $1.8 billion spent there, followed by Montgomery ($940 million), Berks ($667 million), Chester ($484 million), and Schuylkill ($188 million).

The impacts from tourists were directly responsible for 364,000 jobs statewide with a total payroll of $6.29 billion. In the five-county heritage area, tourism spending directly produced 69,000 jobs and $1.50 billion in payroll. Philadelphia was again the most heavily impacted of the counties, with over 26,000 jobs derived from direct tourism spending, followed by Montgomery (15,600), Berks (13,500), Chester (8,900), and Schuylkill (4,500).

Taking into consideration the indirect and inducted multiplier effects of tourism spending, the study estimated that the total economic impact of tourism in the heritage area was $7.3 billion and that tourism spending was responsible for a total of 105,000 jobs with a payroll of $2.62 billion. The job impacts by county are: Philadelphia, 41,000; Montgomery, 25,000; Berks, 19,700; Chester, 13,400; and Schuylkill, 6,000.

Comparing these employment figures with the total regional employment level of 1.9 million jobs, tourism spending accounts for 5.5 percent of all jobs in the region. Berks and Schuylkill Counties have the highest concentration of tourism jobs at 9.4 percent and 9.2 percent, respectively. The other counties are all at or below 5.3 percent. These concentrations were compared with those of four major tourism destination counties in Pennsylvania: Adams (Gettysburg), Lancaster (Dutch Country), Monroe (The Poconos), and Pike (Delaware Water Gap). Among these counties, tourism spending accounts for 16 percent of all jobs overall and as much as 33 percent in Pike County, a rural county with a limited economy. Even in Lancaster County, a major center of manufacturing employment, tourism spending accounts for 13 percent of its jobs.

The table on the next page summarizes these employment profiles.

\(^1\) Impacts from international tourists were not calculated at the county level.
Regarding total spending in the five counties, the greatest share (27 percent) was spent on transportation, which includes airfare, gasoline purchases, taxi fare, etc. Statewide, transportation spending only represents 23 percent of purchases. Spending in categories that create more local business opportunities was lower in the heritage area than statewide.

Just 17 percent of tourist spending in the five counties was for shopping, compared with the state average of 20 percent. Food & beverage (20.5 percent in the heritage area, 21.7 percent statewide) and entertainment (11.6 vs. 12.0 percent) followed the same pattern. Lodging spending was more concentrated in the region than statewide (18.7 to
17.3 percent), but was heavily influenced by Philadelphia’s 23.2 percent figure. Eliminating Philadelphia, only 15.2 percent of spending in the other counties was for lodging, with Schuylkill (5.1 percent) and Berks (10.7 percent) being particularly weak in this category.

Looking at spending another way, Philadelphia accounts for 43 percent of tourist spending in the five-county region, but 53 percent of spending on lodging, while Schuylkill County’s total regional share of 4.5 percent is much higher than its 1.2 percent share of lodging spending. Clearly, many visitors to the region stay in Philadelphia and take day trips to the outlying counties. Another visible trend is in shopping, where 35 percent of tourist spending in the region occurs in Philadelphia and 27 percent in Berks County; total visitor spending in the two counties is just 43 percent and 17 percent, respectively. Again, it is clear that many visitors to Philadelphia make day trips to the Reading outlets, but return to Philadelphia for the evening.

**Pennsylvania Heritage Tourism Study**

Completed in 1999, this study is the most comprehensive research into heritage tourist activity in Pennsylvania to date. Its findings are, for the most part, at the state level, but they do provide many interesting insights into how the demographics and behaviors of heritage tourists differ from other types of tourists.

The study examines and compares five different types of visitors, three of which include people who actually visited heritage sites in Pennsylvania. These three types are core (visitors for whom heritage sites were very important parts of their trips), moderate (for whom heritage sites were somewhat important), and low (for whom heritage sites were simply incidental). The other two groups are heritage tourists who did not visit Pennsylvania and leisure tourists to Pennsylvania who did not visit heritage sites.

In total, the study estimates that, in 1997, tourists took 83.4 million leisure trips to Pennsylvania, of which 21.9 million (26 percent) were heritage trips. Among those taking heritage trips, 10.3 million (47 percent) were core visitors, 8.4 million (38 percent) were moderate visitors, and 3.2 million (15 percent) were low visitors.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>PA Leisure Trips</td>
<td>80.4</td>
<td>77.5</td>
<td>83.4</td>
</tr>
<tr>
<td>Heritage Trips</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Heritage Visitors</td>
<td>9.2</td>
<td>8.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Moderate Heritage Visitors</td>
<td>7.7</td>
<td>8.0</td>
<td>8.4</td>
</tr>
<tr>
<td>Low Heritage Visitors</td>
<td>2.8</td>
<td>2.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Total Heritage Visitors</td>
<td>19.7</td>
<td>18.7</td>
<td>21.9</td>
</tr>
</tbody>
</table>

According to the study, total expenditures from leisure visitors to Pennsylvania in 1997 were $12.09 billion, of which $4.87 billion (40 percent) was spent by heritage visitors. Clearly, heritage visitors spent a great deal more per capita than other leisure visitors; the average
heritage visitor spent $102 per day compared with just $73 for the average leisure visitor. Analyzing spending data further, core and moderate heritage visitors ($102 and $103 per day) spent considerably more than did low visitors ($60 per day).

With respect to spending by category, core heritage visitors spent more in every category than did all leisure visitors. The biggest differences in spending were in food/drink, accommodations, and shopping, for which core visitors spent on average more than $10 per person per day more than all leisure visitors. In all, the average core heritage visitor spent $29.60 on food/drink per day, $28.20 on shopping, and $21.60 on accommodations. Moderate visitors spent less than core visitors on accommodations and entertainment, but more for food/drink and shopping.

![](image)

Importantly, the study examined what motivated travelers either to come or not to come to Pennsylvania for heritage visits. Among core heritage visitors, the most important factor was that it was not too far to travel to, with 64 percent saying this was important. Other key motivating factors were wide variety of activities (51 percent), beautiful landscape/scenery (46 percent), superior heritage activities (38 percent), and good value for money (34 percent).

Among heritage visitors who did not come to Pennsylvania, the primary barrier was that Pennsylvania never came to mind, identified by 48 percent of such travelers. Other reasons for not coming to Pennsylvania were no family connections (32 percent) and having already seen everything (28 percent).

A key measure of satisfaction came from asking the three different types of Pennsylvania heritage visitors if certain words described their experiences. The great majority of core and moderate visitors found their experiences to be educational and scenic. However, while 64 percent of core visitors said their trips were fun, just 42 percent of moderate visitors and only 25 percent of low visitors agreed. This speaks to the perception that, for many non-
aficionados, heritage tourism is not considered to be entertaining. Of note is that, even among core visitors, only 15 percent found their experiences to be romantic.

Although the average duration of visits was longer for core heritage tourists, heritage tourism was only one component of the length of visitation. For all three groups, the overall average number of days spent away from home was higher than the portion of the visit devoted to heritage tourism. Core visitors spent 2.0 days on heritage visits but a total of 3.3 days away from home. Moderate visitors spent an average of 1.8 days for heritage visits compared to a 3.8-day average length of stay, and low visitors spent just 1.3 of an average 4.2 days on heritage visits. Thus while the total average trip length of core visitors was shorter than the other two groups, the time they spent as heritage visitors was greater.

Looking at visitor origin, a large percentage (39%) of core heritage tourists to Pennsylvania originated within the state. Another 33 percent of core tourists came from the neighboring states of New York, New Jersey, Maryland, and Ohio. Among heritage visitors in the survey who did not visit Pennsylvania heritage sites, a significant percentage (27 percent) were from Pennsylvania. This indicates, as suggested earlier, that many people feel that they have seen all there is to see in the state (i.e., they have been to Independence Hall, Valley Forge, Gettysburg, and Lancaster) and thus must travel elsewhere to find an interesting historical experience.

Another issue to consider is seasonality. As many core heritage visitors are retired (see below), they are not limited to travelling during school vacation periods, as travelers with children often are. Accordingly, the peak season for travel among core heritage visitors is after the summer is over. September and October are the most popular months, with August and November as shoulder seasons. The drop-off after November, however, is substantial, (from a 12 percent share in November to just one percent in December). Among moderate heritage tourists the peak season is June through August, a pattern common to tourists in general.

The following points illustrate the demographic profiles of each type of heritage tourist.
• **Core heritage visitors:** Core visitors tend to be older, with the majority of the heads of household being over the age of 50. Their household income levels are fairly modest, with 65 percent of this group earning between $25,000 and $75,000 per year. The fairly low income level is a likely outgrowth of the high percentage of retirees, as 32 percent of these visitors are not employed. About 70 percent are married and another 17 percent are divorced or widowed. They are the most likely of any group to travel in tour parties, with 27 percent visiting in non-family parties of three or more.

• **Moderate heritage visitors:** Moderate visitors are somewhat younger, with a higher percentage of visitors in the 35-49 range than core visitors. They have the highest household income levels of all groups, with 21 percent of this group earning more than $75,000 per year. A lower percentage of these visitors (25 percent) are not employed, and a higher percentage (72 percent) is married. Moderate visitors are likely to be families, as 59 percent of them come with families, and just 18 percent come in tour groups.

• **Low heritage visitors:** Low visitors are the youngest of all of the groups, with 41 percent of household heads being in the 35-49 age range, and just 12 percent over the age of 65. They are most likely to earn in the $50,000 to $75,000 range; 35 percent of households fall into this range, with just 16 percent earning more than $75,000. The percentage of not-employed persons is slightly lower than the moderate group, at 24 percent, and 72 percent are married. This group is the most likely to travel in families, with 60 percent of visitors coming in family parties.

Given the overlap between heritage tourism and outdoor tourism, the study also compared the attributes of heritage tourists and outdoor tourists. The study found that 58 percent of core heritage visitors participate in outdoor activities, compared with 56 percent of the moderate group and 43 percent of the low group.

In general, core heritage tourists are somewhat older than outdoor tourists and significantly older than all tourists, with a median age of 51.2, compared with 47.5 for outdoor tourists and 43.2 for all tourists. Outdoor tourists are more likely to come from in-state than heritage tourists, as 46 percent of outdoor tourists are from Pennsylvania, indicating that outdoor experiences alone do not draw people from out of state as much. Another contrast is that heritage tourists travel in much larger parties (average of 5.2) than outdoor tourists (average of 3.6), as many more outdoor tourist parties are couples rather than families or tour groups. Trip timing is another difference, as outdoor tourists are most likely to come in the summer months.

A final, and very important, item considered in the study was the awareness of and satisfaction with individual heritage areas in Pennsylvania. At the time of the survey, there were 10 heritage areas in the state, including the Schuylkill River State Heritage Corridor. Among Core heritage visitors to the Commonwealth, the Schuylkill River Heritage Corridor ranked fairly low in terms of awareness, as just 32 percent of these people were aware of it, and just 16 percent had visited. Only 19 percent of heritage tourists who visited attractions in other states besides Pennsylvania recognized the Schuylkill River Heritage Corridor name.
The most recognizable and most visited heritage area in Pennsylvania is, by a wide margin, the Lancaster/Dutch Country area, as 91 percent of core visitors were aware of it and 69 percent had visited. No other heritage areas had an awareness level of any higher than 36 percent, and no other was visited by more than 20 percent of core visitors. In terms of visitor satisfaction, the Schuylkill area ranks fairly low, as just 74 percent of those who had visited it were satisfied with the experience. (The median satisfaction level for all 10 heritage areas was 81 percent.)

4. General Findings and Issues for Further Discussion

Based upon the above information, this section presents some general conclusions regarding the market for heritage tourism in the Schuylkill River Valley National Heritage Area. Key concerns regarding the marketability of heritage tourism in the area are also identified.

Primary Tourism Market
The primary tourism market for the Schuylkill River Valley National Heritage Area is the resident population of the five counties. This population consisted of about 3.23 million people as of the 2000 Census, of which the majority now resides outside of Philadelphia. For practical purposes, the center of the region’s population now likely sits in the Valley Forge/King of Prussia area, which thus must be a key anchor for the entire region.
The resident market is important for a number of reasons. First of all, people are always looking for things to do, particularly as a family, close to home. Secondly, a great deal of existing tourism in the suburban counties of Berks, Chester, and Montgomery consists of visiting friends and relatives (VFRs), and the resident population is the conduit for helping VFRs to discover heritage tourism attractions in the region. Finally, many residents of suburban counties have moved from elsewhere and know little about local history, and could therefore be a fertile audience for historical tourism.

Montgomery and Chester Counties, which are immediately around the Valley Forge/King of Prussia area, have the highest levels of income and educational attainment of the five counties and provide a fertile market for heritage tourism. Another significant trend is the great increase in the 45-54 age group, as well as in the number of school-age children (ages 5-17). These increases indicate a greater number of families with children looking for recreational activities, and there may be opportunities to market to these groups.

Another issue to consider is the regional economy. The shift from a manufacturing-based economy to a service-based economy in the region is largely complete and there is still a rather high unemployment rate in the region, specifically in Philadelphia, Berks, and Schuylkill Counties. Although tourism currently represents a significant portion of the regional economy, there is certainly room for growth in this industry. Given the potential for growth and the availability of labor, boosting tourism should be a priority regional economic development strategy, especially in the three counties with higher unemployment rates.

Secondary Tourism Market
Based on research from D.K. Shifflet & Associates, it is evident that the Schuylkill River Valley National Heritage Area has the potential to draw tourists from nearby population centers, particularly the New York and Washington/Baltimore metropolitan areas. Thus the secondary market for heritage area tourism is defined as those two metropolitan areas, as well as the remainder of Pennsylvania and the three states that border the heritage area: Delaware, Maryland, and New Jersey.

In total, there are 29.3 million people living in these nearby states and metropolitan areas, representing more than 10 percent of the population of the United States. Clearly, there is a very deep potential market for tourism from these areas. However, drawing visitors to the Schuylkill River Valley National Heritage Area from most locations within these markets likely would require aggressive cross-marketing with other attractions in the region. In closer-in locations such as other Philadelphia metropolitan area counties, the potential for day trippers will be much higher than more remote locations such as northern Virginia (part of the Washington/Baltimore metropolitan area) or the Connecticut portion of the New York metropolitan area.

Notes on Present Tourist Market
- It is clear that Philadelphia and its surrounding area is the heart and soul of the regional tourism program, and among those visiting the area, historical attractions and touring are
quite popular. With over 11 million people already coming to the area each year (not counting the millions of people who shop at the Reading Outlets), there is a fertile market for enticing today’s visitors to stay longer and visit other nearby attractions.

• As noted, the Visiting Friends and Relatives (VFR) market is extremely important for the heritage area, as the majority of tourism to Philadelphia’s suburbs comes from this market segment. Since these travelers usually stay with their friends or relatives, they do not pay for lodging, they eat out less, and frequently stay in for entertainment, thus having far less economic impact than do other leisure travelers. A challenge for the heritage area will be to reach the VFR market, which will need to be accomplished by educating the residents they visit about the abundance of heritage tourism activities in the area.

• At the present time, the heritage tourism program in Pennsylvania is quite strong, as over one-quarter of all leisure visitors to the state visited at least one heritage-related site, and this group spends a great deal more money than tourists as a whole. However, in terms of profile, the Schuylkill Heritage Corridor rates rather far down the list, trailing Lancaster/Dutch Country, Delaware & Lehigh, and Allegheny Ridge, among others. Even within the heritage area, the most notable attractions (Philadelphia historic sites and museums, Valley Forge), are not typically associated with the Schuylkill River. Making the Schuylkill more recognizable to visitors is a challenge that needs to be addressed.

• The core heritage tourism audience in Pennsylvania has distinct characteristics. It is older, travels in larger parties, is more likely to travel in non-peak tourism months (especially the fall), and actively seeks out historic sites and landscapes. This audience is not insignificant in size and, as baby boomers in the secondary market near retirement age, it will continue to grow. Furthermore, this market is often motivated to travel simply by the proximity of attractions, and the Schuylkill River Valley is accessible and not too far away from its secondary markets.

• Non-core visitor markets do not find heritage tourism to be “fun,” and many such visitors visit historical attractions because they feel they must go in order to truly experience the area. To make attractions more popular, some element of “fun” needs to be considered, although it should remain in balance with historical integrity. Another issue is that the Pennsylvania Heritage Tourism Study found that even core visitors feel that heritage tourism is not “romantic.” Perhaps there are opportunities to add romance to history in the Schuylkill River Valley National Heritage Area.

• Even among those who have visited the area, the level of satisfaction with the experience has been below average. Among Pennsylvania’s nine other heritage areas (as of 1999), all but two ranked higher than the Schuylkill Heritage Corridor in terms of visitor satisfaction. The Schuylkill Heritage Corridor’s satisfaction rating of 74 percent was below those of Rivers of Steel, Lancaster/Dutch Country, Oil Heritage, Endless Mountains, and National Road (89, 85, 85, 84, and 83 percent, respectively). Addressing visitor satisfaction is very important, as word-of-mouth is often a powerful tool in marketing, and negative feedback from visitors can prevent other potential visitors from making trips.
ECONOMIC IMPACT ANALYSIS

Economics Research Associates (ERA) has completed an assessment of the effects of the Schuylkill River Valley National Heritage Area plan alternatives (described in Section 2.1 of the Management Plan) on the regional economy. This analysis is predicated directly on baseline spending findings and examines the four alternatives in reference to the baseline.

The following is a summary of findings regarding the existing (baseline) situation (see tables at end of this appendix:

- The region has approximately 5.87 million heritage visitors (5.05 million to heritage attractions and 825,000 to special events).
- Over 70 percent of visitors come from outside the region: (43 percent from out of state and 28 percent from elsewhere in Pennsylvania).
- Heritage visitors spend a total of 10.3 million nights in the region.
- Nearly all visitors come in the summer (37 percent) and fall (44 percent). Very few come in the winter – just three percent of all.
- Total annual spending by heritage visitors is $358 million, of which 28 percent is spent on food and drink, 21 percent on retail purchases, 20 percent on lodging, 11 percent on recreation/entertainment, and 20 percent on transportation and other purchases.

Alternative A, the “No Action” scenario, assumes no major changes from a management perspective in the SRVNHA. However, it is assumed that economic activity resulting from this alternative will increase somewhat above the existing baseline. This analysis therefore measures the spending impacts resulting from all four alternatives considered (No Action and the three action alternatives):

- Alternative A: No Action
- Alternative B: Places
- Alternative C: Experiences
- Alternative D: Layers

Visitation by County

At the present time, more than 60 percent of the heritage visitors to the Schuylkill River Valley National Heritage Area visit sites, attractions, and events within the City of Philadelphia. The table below shows where visitation presently occurs.
Starting from this base, ERA examined no action scenario and the three action alternatives in light of their recommended levels of effort in terms of physical improvements, tourism marketing, and development of linkages. From this review, the following observations were made about the four alternatives:

- **Alternative A (No Action)** will make no structural changes from the existing situation, and any changes in visitation will be due to the continuation of current trends. As a result, only modest visitation increases of less than five percent should be expected, for both attractions and events.
- **Alternative B (Places)** will emphasize individual sites, and will therefore increase visitation to attractions by a greater factor than visitation to events.
- **Alternative C (Experiences)** will stress themes, and will likely result in a greater increase in visitation to events than in visitation to attractions.
- **Alternative D (Layers)** will place equal weight on both types of visitation and will have the greatest level of public investment and marketing efforts. As a result, it will produce strong increases for both attractions and events.

In all four cases, it is assumed that the more rural counties in the region will see greater percentage increases in visitation. There are two reasons for making this assumption: the existing visitor base is smaller and these areas have more opportunities for future heritage tourism development. So in all three alternatives, Schuylkill County is expected to see the greatest percentage increase in heritage tourism activity, followed in order by Berks, Chester, Montgomery, and Philadelphia. The particular percentage increases for each alternative, category, and county were estimated after carefully reviewing each alternative and data on the existing tourist market.

The table on the following page displays the expected increases in annual heritage tourist visitation to each of the five counties in the region. The Layers Alternative would be expected to add more than 950,000 additional visits to heritage attractions and events in the region, compared with about 370,000 for the Experiences Alternative, 455,000 for the Places Alternative, and just 77,000 for the No Action Alternative.
Adding these amounts to the existing baseline produces a total of between 5.9 million and 6.8 million heritage visits to the SRVNHA each year.

### Additional Tourist Activity by Plan Alternative
**Schuylkill River Valley National Heritage Area**

<table>
<thead>
<tr>
<th>Attractions</th>
<th>Events</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT ANNUAL VISITATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>642,400</td>
<td>224,000</td>
</tr>
<tr>
<td>Chester</td>
<td>408,000</td>
<td>9,000</td>
</tr>
<tr>
<td>Montgomery</td>
<td>518,000</td>
<td>118,000</td>
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<tr>
<td>Philadelphia</td>
<td>3,279,700</td>
<td>352,000</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>199,500</td>
<td>122,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,047,600</td>
<td>825,500</td>
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</table>

<table>
<thead>
<tr>
<th>Attractions</th>
<th>Events</th>
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</thead>
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<tr>
<td><strong>ADDITIONAL FUTURE ANNUAL VISITATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alternative A: No Action</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>2.5%</td>
<td>16,060</td>
</tr>
<tr>
<td>Chester</td>
<td>2.0%</td>
<td>8,160</td>
</tr>
<tr>
<td>Montgomery</td>
<td>2.0%</td>
<td>10,360</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>0.5%</td>
<td>16,399</td>
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<tr>
<td>Schuylkill</td>
<td>5.0%</td>
<td>9,975</td>
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<tr>
<td><strong>Total</strong></td>
<td>60,954</td>
<td>16,025</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Attractions</th>
<th>Events</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternative B: Places</strong></td>
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<td></td>
</tr>
<tr>
<td>Berks</td>
<td>15%</td>
<td>96,360</td>
</tr>
<tr>
<td>Chester</td>
<td>12%</td>
<td>48,960</td>
</tr>
<tr>
<td>Montgomery</td>
<td>10%</td>
<td>51,800</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>5%</td>
<td>163,985</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>20%</td>
<td>39,900</td>
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<tr>
<td><strong>Total</strong></td>
<td>401,005</td>
<td>54,615</td>
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<thead>
<tr>
<th>Attractions</th>
<th>Events</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td><strong>Alternative C: Experiences</strong></td>
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<tr>
<td>Berks</td>
<td>10%</td>
<td>64,240</td>
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<td>Chester</td>
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<td>40,800</td>
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<td>Montgomery</td>
<td>5%</td>
<td>25,900</td>
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<tr>
<td>Philadelphia</td>
<td>2%</td>
<td>65,594</td>
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<tr>
<td>Schuylkill</td>
<td>15%</td>
<td>29,925</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>226,459</td>
<td>142,000</td>
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<tr>
<th>Attractions</th>
<th>Events</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternative D: Layers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>25%</td>
<td>160,600</td>
</tr>
<tr>
<td>Chester</td>
<td>25%</td>
<td>102,000</td>
</tr>
<tr>
<td>Montgomery</td>
<td>20%</td>
<td>103,600</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>10%</td>
<td>327,970</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>40%</td>
<td>79,800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>773,970</td>
<td>178,300</td>
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</table>

Source: Economics Research Associates
Although the rural counties are projected to have larger percentage gains, it should be noted that the absolute gains in visitation are greater in the large counties, as their bases are much larger. For example, in the Layers alternative, Philadelphia County is projected to add another 363,000 visits—the most of any county.

**Additional Economic Activity by County**

Visitation habits and spending patterns of visitors to the heritage area will differ from county to county, and often within a county. For example, visitors to heritage sites in Reading will likely spend money in different ways from visitors to Dutch Hex barns in rural Berks County. However, at this level of analysis, the overall spending averages for the region have been used to estimate future spending by county, as more detailed spending data cannot be accurately estimated.

The current levels of per capita spending per trip in the area are as follows:

**Per Capita Spending per Trip by Category**

<table>
<thead>
<tr>
<th>Category</th>
<th>Visitors to Attractions</th>
<th>Visitors to Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food/Drink</td>
<td>$18.43</td>
<td>$7.93</td>
</tr>
<tr>
<td>Retail</td>
<td>$13.97</td>
<td>$5.93</td>
</tr>
<tr>
<td>Lodging</td>
<td>$13.66</td>
<td>$5.15</td>
</tr>
<tr>
<td>Recreation/Entertainment</td>
<td>$7.21</td>
<td>$3.06</td>
</tr>
<tr>
<td>Transportation/Other</td>
<td>$13.15</td>
<td>$5.42</td>
</tr>
<tr>
<td><strong>Total Spending</strong></td>
<td><strong>$66.42</strong></td>
<td><strong>$27.48</strong></td>
</tr>
</tbody>
</table>

Source: Economics Research Associates

To calculate the total spending increase in the region for each alternative, these per capita spending amounts were applied to the change in visitation calculated above. At these levels of per capita spending and increased visitation, the total expected annual spending increases in the region (above the current baseline of $358 million) would be as follows:

- Alternative A: No Action $5 million
- Alternative B: Places $28 million
- Alternative C: Experiences $19 million
- Alternative D: Layers $56 million

*The overall annual spending level by heritage tourists in the region would therefore be somewhere in the range of $363 million to $414 million.*

The table below shows the expected spending increases for each county.
Additional Tourist Spending by Plan Alternative
Schuylkill River Valley National Heritage Area

<table>
<thead>
<tr>
<th></th>
<th>Attractions</th>
<th></th>
<th>Events</th>
<th></th>
<th>Total Spending Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$/Visitor:</td>
<td>New Spending</td>
<td>$/Visitor:</td>
<td>New Spending</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>($000s)</td>
<td></td>
<td>($000s)</td>
<td></td>
</tr>
<tr>
<td><strong>Alternative A:</strong> No Action</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>16,060</td>
<td>$1,066.8</td>
<td>5,600</td>
<td>$153.9</td>
<td>$1,220.7</td>
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<tr>
<td>Chester</td>
<td>8,160</td>
<td>$542.0</td>
<td>180</td>
<td>$4.9</td>
<td>$547.0</td>
</tr>
<tr>
<td>Montgomery</td>
<td>10,360</td>
<td>$688.2</td>
<td>2,360</td>
<td>$64.9</td>
<td>$753.0</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>16,399</td>
<td>$1,089.3</td>
<td>1,760</td>
<td>$48.4</td>
<td>$1,137.6</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>9,975</td>
<td>$662.6</td>
<td>6,125</td>
<td>$168.3</td>
<td>$830.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60,954</td>
<td><strong>$4,048.8</strong></td>
<td>16,025</td>
<td><strong>$440.4</strong></td>
<td><strong>$4,489.2</strong></td>
</tr>
<tr>
<td><strong>Alternative B:</strong> Places</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>96,360</td>
<td>$6,400.6</td>
<td>22,400</td>
<td>$615.6</td>
<td>$7,016.3</td>
</tr>
<tr>
<td>Chester</td>
<td>48,960</td>
<td>$3,252.1</td>
<td>900</td>
<td>$24.7</td>
<td>$3,276.9</td>
</tr>
<tr>
<td>Montgomery</td>
<td>51,800</td>
<td>$3,440.8</td>
<td>5,900</td>
<td>$162.2</td>
<td>$3,602.9</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>163,985</td>
<td>$10,892.6</td>
<td>7,040</td>
<td>$193.5</td>
<td>$11,086.1</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>39,900</td>
<td>$2,650.3</td>
<td>18,375</td>
<td>$505.0</td>
<td>$3,155.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>401,005</td>
<td><strong>$26,636.5</strong></td>
<td>54,615</td>
<td><strong>$1,501.0</strong></td>
<td><strong>$28,137.5</strong></td>
</tr>
<tr>
<td><strong>Alternative C:</strong> Experiences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>64,240</td>
<td>$4,267.1</td>
<td>56,000</td>
<td>$1,539.1</td>
<td>$5,806.2</td>
</tr>
<tr>
<td>Chester</td>
<td>40,800</td>
<td>$2,710.1</td>
<td>11,800</td>
<td>$324.3</td>
<td>$2,044.7</td>
</tr>
<tr>
<td>Montgomery</td>
<td>25,900</td>
<td>$1,720.4</td>
<td>35,200</td>
<td>$967.4</td>
<td>$5,324.5</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>65,594</td>
<td>$4,357.0</td>
<td>36,750</td>
<td>$1,010.0</td>
<td>$2,997.8</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>29,925</td>
<td>$1,987.7</td>
<td>142,000</td>
<td>$3,902.7</td>
<td>$18,945.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>226,459</td>
<td><strong>$15,042.4</strong></td>
<td>142,000</td>
<td><strong>$3,902.7</strong></td>
<td><strong>$18,945.1</strong></td>
</tr>
<tr>
<td><strong>Alternative D:</strong> Layers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berks</td>
<td>160,600</td>
<td>$10,667.7</td>
<td>56,000</td>
<td>$1,539.1</td>
<td>$12,206.8</td>
</tr>
<tr>
<td>Chester</td>
<td>102,000</td>
<td>$6,775.3</td>
<td>2,250</td>
<td>$61.8</td>
<td>$6,837.1</td>
</tr>
<tr>
<td>Montgomery</td>
<td>103,600</td>
<td>$6,881.6</td>
<td>23,600</td>
<td>$648.6</td>
<td>$7,530.2</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>327,970</td>
<td>$21,785.2</td>
<td>35,200</td>
<td>$967.4</td>
<td>$22,752.6</td>
</tr>
<tr>
<td>Schuylkill</td>
<td>79,800</td>
<td>$5,300.7</td>
<td>61,250</td>
<td>$1,683.4</td>
<td>$6,984.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>773,970</td>
<td><strong>$51,410.4</strong></td>
<td>178,300</td>
<td><strong>$4,900.3</strong></td>
<td><strong>$56,310.7</strong></td>
</tr>
</tbody>
</table>

Source: Economics Research Associates

**Spending Patterns**

Beyond just increasing the gross amount of spending by heritage tourists in the region, a likely outcome of any of the three action alternatives for the SRVNAH would be to alter the patterns of spending in the region. These patterns include amount spent by visitor origin, category of spending, and season.
Presently, heritage tourist spending in the region breaks down as follows for each of these three categories:

- **By Visitor Origin:**
  - **Attractions**
    - Local: 28%
    - Other Pennsylvania: 27%
    - Out of State: 45%
  - **Events**
    - Local: 38%
    - Other Pennsylvania: 32%
    - Out of State: 30%

- **By Category of Spending:**
  - **Attractions**
    - Food/Drink: 28%
    - Retail: 21%
    - Lodging: 21%
    - Recreation/Entertainment: 11%
    - Transportation/Other: 20%
  - **Events**
    - Food/Drink: 29%
    - Retail: 22%
    - Lodging: 19%
    - Recreation/Entertainment: 11%
    - Transportation/Other: 20%

- **By Season:**
  - **Attractions**
    - Spring: 16%
    - Summer: 33%
    - Fall: 47%
    - Winter: 4%
  - **Events**
    - Spring: 10%
    - Summer: 62%
    - Fall: 27%
    - Winter: 0%

The table on the next page illustrates what would occur for each alternative if these percentages were to be carried forward into the future. However, as mentioned above, it is likely that some shifts will occur within the region’s tourist economy, such as:

- More visitors from out of state will visit.
- Spending for categories (i.e., lodging, transportation, recreation/entertainment) that are more dependent on out of state visitation will increase.
- Visitation will increase during off-peak seasons, particularly winter.

There is no way of knowing the extent to which these changes will occur, and how long it will take for them to take hold. So while the results on the next page may not prove to be completely accurate, they do illustrate in broad strokes how different components of the tourism economy are likely to change.
### Additional Tourist Spending (in $000s) by Type, Assuming No Changes in Spending Patterns
Schuylkill River Valley National Heritage Area

<table>
<thead>
<tr>
<th></th>
<th>Alternative A: No Action</th>
<th>Alternative B: Places</th>
<th>Alternative C: Experiences</th>
<th>Alternative D: Layers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attractions</td>
<td>Events</td>
<td>Total</td>
<td>Attractions</td>
</tr>
<tr>
<td>Total New Spending</td>
<td>$4,048.8</td>
<td>$440.4</td>
<td>$4,489.2</td>
<td>$26,636.5</td>
</tr>
<tr>
<td>Spending by Visitor Origin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>$1,133.7</td>
<td>$166.5</td>
<td>$1,300.2</td>
<td>$7,458.3</td>
</tr>
<tr>
<td>Other PA</td>
<td>$1,098.8</td>
<td>$142.7</td>
<td>$1,241.5</td>
<td>$7,228.8</td>
</tr>
<tr>
<td>Out of State</td>
<td>$1,816.3</td>
<td>$131.2</td>
<td>$1,947.6</td>
<td>$11,949.4</td>
</tr>
<tr>
<td>Spending by Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food/Drink</td>
<td>$1,123.6</td>
<td>$127.1</td>
<td>$1,250.7</td>
<td>$7,391.7</td>
</tr>
<tr>
<td>Retail</td>
<td>$851.8</td>
<td>$95.0</td>
<td>$946.8</td>
<td>$5,603.9</td>
</tr>
<tr>
<td>Lodging</td>
<td>$832.7</td>
<td>$82.5</td>
<td>$915.2</td>
<td>$5,478.1</td>
</tr>
<tr>
<td>Rec/Entertainment</td>
<td>$439.4</td>
<td>$49.0</td>
<td>$488.4</td>
<td>$2,890.7</td>
</tr>
<tr>
<td>Transport/Other</td>
<td>$801.4</td>
<td>$86.9</td>
<td>$888.2</td>
<td>$5,272.0</td>
</tr>
<tr>
<td>Spending by Season</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>$663.8</td>
<td>$42.1</td>
<td>$706.0</td>
<td>$4,367.1</td>
</tr>
<tr>
<td>Summer</td>
<td>$1,326.3</td>
<td>$275.2</td>
<td>$1,601.4</td>
<td>$8,725.3</td>
</tr>
<tr>
<td>Fall</td>
<td>$1,912.8</td>
<td>$120.9</td>
<td>$2,033.8</td>
<td>$12,584.2</td>
</tr>
<tr>
<td>Winter</td>
<td>$145.8</td>
<td>$2.1</td>
<td>$148.0</td>
<td>$959.3</td>
</tr>
</tbody>
</table>

Source: Economics Research Associates
Leverage of Public Investment by Alternative

Another aspect of the varied economic impacts of the four alternatives for the SRVNHA is the potential ability to leverage further public investment. At the present time, the heritage area’s annual budget for projects is approximately $1,000,000, of which $350,000 comes from the Commonwealth of Pennsylvania through the Heritage Parks program and $650,000 from public and institutional matching funds. (Additional federal funding for planning – but not yet for projects – is being provided through the National Heritage Areas program). Thus, for every dollar invested by the state Heritage Parks program, about $1.86 in additional funding is leveraged.

In the No Action Alternative, this funding level would remain the same. However, under the action alternatives, the National Park Service would provide about $1,000,000 per year in direct funding for projects which, in addition to the $350,000 in state funding, would translate to a total direct public investment of $1.35 million.

While the direct funding would remain the same in all three action scenarios, the amount of additional public and institutional matching funds would vary. These variations would be due to different types and levels of exposure for each of the three. For example, since the Places Alternative would be more geared towards resource preservation and community revitalization than the Experiences Alternative, local governments, non-profits, and businesses involved in these pursuits would be more inclined to support the heritage area. Conversely, the Experiences Alternative would be likely to generate more financial support from entities focused on education/interpretation and recreation. The Layers Alternative, which presents the highest profile of all of the alternatives, would be expected to generate the greatest amount of matching funds across the board.

The expected leverage amounts for each scenario follow this logic. The amounts listed on the table below reflect ERA’s best educated guess of what could be reasonably achieved based on the above assumptions. In all three cases, the baseline leverage amount under the state program of $650,000 is assumed, and other types of leverage are in addition to that amount.

As the table shows, the Places and Experiences Alternatives should each be expected to generate about $2.15 in additional matching funds for each dollar invested, although the distribution of funding will differ for each. The Layers Alternative, the most aggressive of the three, could be expected to leverage about $2.89 in additional funding for every dollar of direct public investment.
Summary of Annual Spending by Plan Alternative
Schuylkill River Valley National Heritage Area

<table>
<thead>
<tr>
<th>Alternatives</th>
<th>A: No Action</th>
<th>B: Places</th>
<th>C: Experiences</th>
<th>D: Layers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Funding</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State of Pennsylvania</td>
<td>$350,000</td>
<td>$350,000</td>
<td>$350,000</td>
<td>$350,000</td>
</tr>
<tr>
<td>National Park Service (project based)</td>
<td>$0</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$350,000</td>
<td>$1,350,000</td>
<td>$1,350,000</td>
<td>$1,350,000</td>
</tr>
<tr>
<td><strong>Public &amp; Institutional Matching Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline Funding</td>
<td>$650,000</td>
<td>$650,000</td>
<td>$650,000</td>
<td>$650,000</td>
</tr>
<tr>
<td>Resource Preservation/Enhancement</td>
<td>$0</td>
<td>$750,000</td>
<td>$600,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Education/Interpretation</td>
<td>$0</td>
<td>$150,000</td>
<td>$250,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Recreation</td>
<td>$0</td>
<td>$400,000</td>
<td>$600,000</td>
<td>$750,000</td>
</tr>
<tr>
<td>Community Revitalization</td>
<td>$0</td>
<td>$650,000</td>
<td>$500,000</td>
<td>$800,000</td>
</tr>
<tr>
<td>Heritage Tourism</td>
<td>$0</td>
<td>$300,000</td>
<td>$300,000</td>
<td>$400,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>$650,000</td>
<td>$2,900,000</td>
<td>$2,900,000</td>
<td>$3,900,000</td>
</tr>
<tr>
<td><strong>Total Annual Spending</strong></td>
<td>$1,000,000</td>
<td>$4,250,000</td>
<td>$4,250,000</td>
<td>$5,250,000</td>
</tr>
<tr>
<td><strong>$ Leveraged per $ in Direct Funding</strong></td>
<td>$1.86</td>
<td>$2.15</td>
<td>$2.15</td>
<td>$2.89</td>
</tr>
</tbody>
</table>

Source: Schuylkill River Greenway Association; Wallace Roberts & Todd; Economics Research Associates
Potential Sources of Funding

The authorizing legislation for the Schuylkill River Valley National Heritage Area calls for the Management Plan to “specify, as of the date of the plan, existing and potential sources of funding to protect, manage, and develop the Heritage Area.” Key sources of funding include the Pennsylvania Heritage Parks Program (approximately $350,000 a year) and the federal funding made available as a result of National Heritage Area designation (up to $10 million, of which not more than $1 million can be appropriated in any one fiscal year). This funding will be used in part as “seed money” to leverage funding that is available from other public and private sources to achieve heritage resource preservation, restoration, and development. This appendix outlines potential sources of funding for the following categories:

1. Cultural resources
2. Economic development and community revitalization
3. Environmental resources – acid mine drainage
4. Environmental resources – watershed preservation and restoration
5. Recreational resources
6. Private foundations

This list is not intended to be definitive, but rather is representative of the range of funding programs available at the time of Management Plan preparation. Effort has been made to include updated links to individual web pages.

1. Cultural Resources

- Certified Local Government Funding
  http://www.artsnet.org/phmc/phmc_frame.html
  Certified Local Government Grants requiring a 60/40 match are available to support projects in six categories: Cultural Resource Surveys, National Register Nominations, Technical and Planning Assistance, Educational and Interpretative Programs, Staffing and Training, and Pooling and Third Party Administration. The grants are administered on a competitive basis, and the awards are made annually.
based on a peer review process. Funding under this program is limited to Certified Local Governments.

- **Keystone Historic Preservation Grants**
  [http://www.artsnet.org/phmc/phmc_frame.html](http://www.artsnet.org/phmc/phmc_frame.html)
  Keystone Historic Preservation Grants requiring a 50/50 cash match are available for the preservation, restoration and/or rehabilitation of historic resources listed in or eligible for listing in the National Register of Historic Places. The grants are administered on a competitive basis, and the awards are made annually based on a peer review process. Nonprofit organizations and public agencies that own or support a publicly accessible historic property listed, or eligible for listing, in the National Register of Historic Places, or that own or support a contributing historic property in a National Register Historic District, may apply for grant assistance.

- **PHMC Historic Preservation Grants**
  [http://www.artsnet.org/phmc/phmc_frame.html](http://www.artsnet.org/phmc/phmc_frame.html)
  In 1999, the Pennsylvania Historical and Museum Commission and Preservation Pennsylvania launched a campaign to gather information as the first step in developing a five-year historic preservation plan for Pennsylvania. The plan focuses on (1) educating Pennsylvanians about our heritage and its value, (2) building better communities through preservation, and (3) providing strong leadership at the state level. Historic Preservation Grants are available in two different amounts to support projects in the categories of Cultural Resource Surveys, National Register Nominations, Planning and Development Assistance, Educational and Interpretive Programs, and Archaeology.

- **General Operating Support Grants for Museums**
  [http://www.artsnet.org/phmc/phmc_frame.html](http://www.artsnet.org/phmc/phmc_frame.html)
  General Operating Support Grants for Museums require no match and are restricted to museums with annual operating budgets exceeding $100,000 (excluding capital and in-kind services). Institutions that meet the American Association of Museums' definition that “a museum must be a legally organized nonprofit institution, essentially educational in nature, with professional staff, which owns or utilizes tangible objects, cares for them, and exhibits them to the public on some regular schedule” may apply for grant assistance.
• **Local History Grants**  
  [http://www.artsnet.org/phmc/phmc_frame.html](http://www.artsnet.org/phmc/phmc_frame.html)
  Local History Grants are available in two different amounts to support projects in the categories of Public Programs, Research and Writing, and Educational Programs. The following are a few of the types of organizations that are eligible to apply: colleges and universities, community groups, heritage organizations, historical societies, libraries (public and private), local governments, museums, schools and school districts, etc. Grant amounts up to and including $5,000 require no matching funds, and grants in amounts of $5,001 and up to and including $15,000 require 50/50 matching funds.

• **Historical Marker Grants**  
  [http://www.artsnet.org/phmc/phmc_frame.html](http://www.artsnet.org/phmc/phmc_frame.html)
  Grants requiring a cash match (generally 50/50) are available to support the manufacture of approved state historical markers. The Pennsylvania Historical and Museum Commission approves historical marker nominations annually based upon the review of an independent panel of experts. Any nonprofit organization or public agency that wishes to support a state historical marker previously approved by the Pennsylvania Historical and Museum Commission and that meets the eligibility requirements may apply for funding. Grants are generally awarded on a 50/50 cash matching basis. Grant awards for city and roadside markers generally will not exceed $550 and $650, respectively.

• **Museum Project Grants**  
  [http://www.artsnet.org/phmc/phmc_frame.html](http://www.artsnet.org/phmc/phmc_frame.html)
  Museum Project Grants are available in two different amounts to support projects in the categories of Institutional Development, Collections Management, and Educational and Interpretive Programs. Organizations that meet the American Association of Museums' definition that "a museum must be a legally organized nonprofit institution, essentially educational in nature, with professional staff, which owns or utilizes tangible objects, cares for them, and exhibits them to the public on some regular schedule" may apply for grant assistance. Grants in amounts up to and including $5,000 require no matching funds. Grants in amounts of $5,001 and up to and including $15,000 require 50/50 matching funds.
LIVING WITH THE RIVER: Schuylkill River Valley National Heritage Area
Draft Management Plan and Environmental Impact Statement

- **Conservation Assessment Program (CAP)**
  The Conservation Assessment Program (CAP) is a federally funded grant program from the Institute of Museum and Library Services that is administered by Heritage Preservation. CAP funds a general conservation survey of a museum's collections, environmental conditions and sites. Conservation priorities are identified by professional conservators who spend two days on-site and three days writing a report. The reports help museums develop strategies for improved collections care and provide a tool for long-range planning and fund-raising.

- **National Endowment for the Humanities (NEH)**
  The National Endowment for the Humanities (NEH) is a federal agency that supports learning in history, literature, philosophy, and other areas of the humanities. The NEH funds research, education, museum exhibitions, documentaries, preservation, and activities in the states. Projects are funded through five programs: Division of Preservation and Access, Division of Public Programs, Division of Research, Division of Education, and Office of Challenge Grants.

- **NEH Special Initiative for Local History Grants**
  [http://www.neh.fed.us/grants/guidelines/localhistory.html#program](http://www.neh.fed.us/grants/guidelines/localhistory.html#program)
  NEH Special Initiative for Local History grants help institutions strengthen their ability to sustain long-term humanities programs in local history. Awards are made to historical societies and historic sites, museums, public libraries, and other nonprofit entities including colleges, community colleges, and universities. In addition to programs, local history initiative grants can also help with limited direct costs, such as acquisitions, the purchase of capital equipment, and even fund-raising.

- **National Endowment for the Arts (NEA)**
  [http://arts.endow.gov/](http://arts.endow.gov/)
  The National Endowment for the Arts provides support to eligible organizations for exemplary projects in dance, design, folk and traditional arts, literature, media arts (film, television, video, radio, audio art), museums, music, musical theater, opera, theater, visual arts, and multidisciplinary projects. Grants to Organizations are available in five
categories: Creation & Presentation, Planning & Stabilization, Heritage & Preservation, Access and Education.

- **Rehabilitation Investment Tax Credits**
  [http://www.artsnet.org/phmc/phmc_frame.html](http://www.artsnet.org/phmc/phmc_frame.html)

Pennsylvania Rehabilitation investment tax credits are the most widely used historic preservation incentive program. Certain expenses incurred in connection with the rehabilitation of an old building are eligible for a tax credit. Rehabilitation investment tax credits are available to owners and certain long-term leases of income producing properties that are listed on the National Register of Historic Places. There are two rates: 20% for historic buildings and 10% for non-residential, non-historic buildings built before 1936.

- **Charitable Contribution Deduction**
  [http://www.artsnet.org/phmc/phmc_frame.html](http://www.artsnet.org/phmc/phmc_frame.html)

The Pennsylvania charitable contribution deduction is taken in the form of a conservation easement and enables the owner of a "certified historic structure" to receive a one-time tax deduction. A conservation easement usually involves the preservation of a building's façade by restricting the right to alter its appearance.

- **Preservation Tax Incentives**
  [http://www2.cr.nps.gov/tps/tax/brochure2.htm#Preservation%20Tax%20Incentives](http://www2.cr.nps.gov/tps/tax/brochure2.htm#Preservation%20Tax%20Incentives)

The Federal government encourages the preservation of historic buildings through various means. One of these is the program of Federal tax incentives to support the rehabilitation of historic and older buildings. The Preservation Tax Incentives reward private investment in rehabilitating historic properties such as offices, rental housing, and retail stores. Current tax incentives for preservation, established by the Tax Reform Act of 1986 (PL 99-514; Internal Revenue Code Section 47 [formerly Section 48(g)]) include: 1) a 20% tax credit for the certified rehabilitation of certified historic structures and 2) a 10% tax credit for the rehabilitation of non-historic, non-residential buildings built before 1936. For both credits, the rehabilitation must be a substantial one and must involve a depreciable building.
2. Economic Development and Community Revitalization

- **Small Business First (SBF)**
  
  [Link](http://www.inventpa.com/docs/Business_Financing_Directory.pdf)
  
  Small Business First provides funding for small businesses, including:
  low-interest loan financing for land and building acquisition and
  construction; machinery and equipment purchases and working capital.
  Eligible small businesses (100 employees or less) may include:
  manufacturing, industrial, agricultural processors, mining enterprises,
  export-related, advanced technology and computer-related services,
  hotels, motels or restaurants, environmental compliance/pollution
  prevention, land and building acquisition and construction, etc.

- **Pennsylvania Minority Business Development Authority (PMBDA)**
  
  [Link](http://www.inventpa.com/docs/Business_Financing_Directory.pdf)
  
  The Pennsylvania Minority Business Development Authority provides
  low-interest loan financing to businesses owned and operated by ethnic
  minorities for land and building acquisition; building construction and
  renovation; machinery and equipment acquisition and installation; and
  working capital.

- **Community Economic Development Loan Program (CED)**
  
  [Link](http://www.inventpa.com/docs/Business_Financing_Directory.pdf)
  
  The Community Economic Development Loan Program provides low-
  interest loans for projects in distressed communities, in an effort to
  stimulate self-help initiatives and help people build assets at the
  individual, family and community levels. Small businesses (100
  employees or less) that are located in a DCED designated distressed
  community or Keystone Opportunity Zone are eligible to apply. Uses
  include: land and building acquisition; building, construction and
  renovation; machinery and equipment acquisition and installation, and
  working capital. Loans may be up to $200,000 or 50% of total eligible
  project cost – whichever is less.

- **Pennsylvania Capital Access Program (PennCAP)**
  
  [Link](http://www.inventpa.com/docs/Business_Financing_Directory.pdf)
  
  Loan guarantee through participating banks to be used to support a
  wide variety of business purposes. A borrower must have a branch of a
  participating bank in their local area in order to receive a PennCAP
  loan through that bank. Borrowers should contact the participating
  banks to discuss their eligibility. Participating banks include: Fidelity
Deposit and Discount Bank, PNC Bank, AmeriServ Financial and Sovereign Bank. Guaranteed loans up to $500,000 can be used for land acquisition, building, equipment and working capital.

- **Community Development Block Grants (CDBG)**
  
  
  The Community Development Block Grant (CDBG) program is federally funded through the United States Department of Housing and Urban Development (HUD). The program awards grants in order to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services. CDBG funds are to be used for activities that benefit low- and moderate-income persons, carry out activities which aid in the prevention or elimination of slums and blight, or address existing conditions that pose a serious and immediate threat to the welfare of the community where other financial resources are not available to meet these needs. CDBG funds may be used for activities that include, but are not limited to: acquisition of real property; relocation and demolition; rehabilitation of residential and non-residential structures; construction of public facilities and improvements, such as water and sewer facilities, streets, neighborhood centers; the conversion of schools for eligible purposes, as well as public services.

- **Rural Initiative Program**
  
  [http://www.ruralpa.org/initiatives.html](http://www.ruralpa.org/initiatives.html)
  
  Sponsored by the Center for Rural Pennsylvania, the Rural Initiatives program provides financial assistance to support projects, activities, or events that addresses one or more of the Center’s mandated research areas. These areas include rural people and communities; economic development; local government finance and administration; community services; natural resources and the environment; rural values and social change; and educational outreach. Rural Initiatives leverages finances and assistance through partnerships with groups and organizations to develop models for solving local problems, or implementing innovative programs. These efforts must be locally driven, result in increased or enhanced capacity, and be self-sustaining. Only legally chartered nonprofit organizations may receive rural initiative funding. It is encouraged, however, and expected that projects will involve a diversity of groups and organizations, including state agencies.
3. Environmental Resources – Acid Mine Drainage

- **Abandoned Mine Land Reclamation Program**  
  [http://www.osmre.gov/fundstat.htm](http://www.osmre.gov/fundstat.htm)  
  The Abandoned Mine Land Reclamation (AMLR) Program is designed to protect the public and correct environmental damage caused by coal and, to a limited extent, non-coal mining practices that occurred prior to August 3, 1977. AMLR provides for the restoration of eligible lands and waters mined and abandoned or left inadequately restored. AMLR is divided into two programs, the State Indian Reclamation Program and the Federal Reclamation Program. Both programs address problems such as dangerous highwalls, slides, subsidence, dangerous portals, and polluted water. Pennsylvania’s share of available AML funds as of 9-30-02 was approximately $54.7 million.

- **Appalachian Clean Streams Initiative**  
  [http://www.osmre.gov/acsiplan.htm](http://www.osmre.gov/acsiplan.htm)  
  The mission of the Appalachian Clean Streams Initiative is to facilitate and coordinate citizen groups, university researchers, the coal industry, corporations, the environmental community, and local, state, and federal government agencies that are involved in cleaning up streams polluted by acid drainage. A major goal of the clean-up plan is to increase the exchange of information and eliminate duplicate efforts among local, state, and federal government agencies working on acid drainage projects. As part of the Appalachian Clean Streams Initiative, funds are available to award cooperative agreements to not-for-profit organizations, especially small watershed groups, that undertake local acid mine drainage (AMD) reclamation projects. The maximum award amount for each cooperative agreement will normally be $100,000 in order to assist as many groups as possible to undertake actual construction projects to clean streams impacted by acid mine drainage.

- **319 Program for Nonpoint Source Implementation Grants**  
  The 319 Program grants are available to assist States in implementing EPA-approved Section 319 non-point source management programs. EPA’s funding priority is to award grants which promote implementation of watershed-based plans that result in improved water quality in impaired waters in accordance with section 319 of the Clean Water Act (CWA). Nonpoint source pollution reduction projects can be used to protect source water areas and the general quality of water.
resources in a watershed. Formula grants are awarded to a lead agency in each state and territory.

• **Brownfields Redevelopment Assistance Program**  
  [www.phoenixland.org/brap/](http://www.phoenixland.org/brap/)
  In 1999, PEC and Phoenix Land Recycling Company, a nonprofit brownfields “pre-developer,” established the Brownfields Redevelopment Assistance Program to train and mentor community-based organizations in southeastern Pennsylvania to clean up and redevelop brownfields sites. The project entails classroom training on brownfields redevelopment for community development corporations and municipalities, as well as continuing support, including mentoring, for participating groups.

• **Growing Greener**  
  [http://www.dep.state.pa.us/growgreen/](http://www.dep.state.pa.us/growgreen/)
  Signed into law in 1999 and reauthorized in 2002, Growing Greener is the largest single investment of state funds in Pennsylvania’s history to address critical environmental concerns. Over the next 10 years, $1.3 billion will be distributed among four state agencies to address a variety of projects. Included are funds available from the Department of Environmental Protection for watershed restoration & protection and abandoned mine reclamation.

• **Pennsylvania Land Recycling Program**  
  [http://www.dep.state.pa.us/dep/deputate/airwaste/wm/landrecy/default.htm](http://www.dep.state.pa.us/dep/deputate/airwaste/wm/landrecy/default.htm)
  The Pennsylvania Land Recycling Program’s goal is to help transform vacant brownfields into job-producing sites while protecting the environment. Grant and low-interest loan financing is provided to perform environmental site assessment and remediation work at former industrial sites. Public and private nonprofit economic development entities and companies involved in reuse of former industrial land are eligible for financial assistance, which includes grants and loans up to $200,000 for environmental assessment and $1 million for remediation.
4. Environmental Resources – Watershed Protection and Restoration

- **Growing Greener**
  [http://www.dep.state.pa.us/growgreen/](http://www.dep.state.pa.us/growgreen/)
  Signed into law in 1999 and reauthorized in 2002, Growing Greener is the largest single investment of state funds in Pennsylvania’s history to address critical environmental concerns. Over the next 10 years, $1.3 billion will be distributed among four state agencies to address a variety of projects. Included are funds available from the Department of Agriculture (farmland and open-space preservation), Department of Environmental Protection (watershed restoration & protection), and Pennsylvania Infrastructure Investment Authority (water & sewer system upgrades).

- **Environmental Stewardship And Watershed Protection Grants**
  [http://www.dep.state.pa.us/growgreen/watershedprotection/default.htm](http://www.dep.state.pa.us/growgreen/watershedprotection/default.htm)
  The Environmental Stewardship and Watershed Protection Act authorizes the Department of Environmental Protection (DEP) to allocate nearly $547 million in grants for acid mine drainage abatement, mine cleanup efforts, abandoned oil and gas well plugging and local watershed-based conservation projects. These projects can include watershed assessments and development of watershed restoration or protection plans; implementation of watershed restoration or protection projects; construction of mine drainage remediation systems; reclamation of previously mined lands; and demonstration/education projects and outreach activities. Eligible applicants include: counties, authorities and other municipalities; county conservation districts; watershed organizations; and other organizations involved in the restoration and protection of Pennsylvania's environment.

- **The Pennsylvania Rivers Conservation Program**
  [http://www.dcnr.state.pa.us/rivers/riverfact.htm](http://www.dcnr.state.pa.us/rivers/riverfact.htm)
  The Pennsylvania Rivers Conservation Program has been developed to conserve and enhance river resources through preparation and accomplishment of locally initiated plans. The program provides technical and financial assistance to municipalities and river support groups to carry out planning, implementation, acquisition and development activities. Six components are used to carry out these functions: Planning Grants, Technical Assistance, Rivers Registry, Implementation Grants, Development Grants and Acquisition Grants.
• **PENNVEST**  
  [http://www.pennvest.state.pa.us/pennvest/site/default.asp](http://www.pennvest.state.pa.us/pennvest/site/default.asp)  
  PENNVEST provides financial assistance and service to Pennsylvania communities and citizens by funding sewer, stormwater and water projects throughout the Commonwealth in an effort to improve Pennsylvania's environment and the health of its people. Its financial assistance program works to provide safe drinking water, restore and preserve the states rivers and streams, as well as protect natural resources while attempting to create new opportunities for economic development.

• **USDA Watershed Protection and Flood Prevention Program**  
  Also known as the "Small Watershed Program" or the "PL 566 Program," this program provides technical and financial assistance to address resource and related economic problems on a watershed basis. Projects related to watershed protection, flood prevention, water supply, water quality, erosion and sediment control, wetland creation and restoration, fish and wildlife habitat enhancement, and public recreation are eligible for assistance. Technical and financial assistance is also available for planning and installation of improvements to protect, develop, and use land and water resources in small watersheds. Eligible applicants include local or state agencies, county, municipality, town or township, soil and water conservation district, flood prevention/flood control district, Indian tribe or tribal organization, or other sub-unit of state government with the authority and capacity to carry out, operate, and maintain installed works of improvement may apply. Projects are limited to watersheds containing less than 250,000 acres.

• **The River Network**  
  [http://www.rivernetwork.org/index.cfm](http://www.rivernetwork.org/index.cfm)  
  The River Network's mission is to help people understand, protect and restore rivers and their watersheds. The River Network has a $5-million budget, with 34 staff working in four offices across the United States, and provides personalized assistance, training, and information to more than 500 partner groups through its watershed programs. The River Network also makes grants available to local watershed partnerships to support their organizational development and long-term effectiveness.
5. **Recreational Resources**

- **The Pennsylvania Recreational Trails Program (PRTP)**
  [http://www.dcnr.state.pa.us/recreation/grants/recstrails.htm](http://www.dcnr.state.pa.us/recreation/grants/recstrails.htm)
  The Pennsylvania Recreational Trails Program provides funds to develop and maintain recreational trails and trail related facilities for motorized and non-motorized recreational trail use. Federal funding for the program is through the Federal Highway Administration (FHWA) and the Transportation Equity Act for the 21st Century (TEA 21). In Pennsylvania, the Recreational Trails Program is administered by the Department of Conservation & Natural Resources (DCNR), Bureau of Recreation & Conservation (BRC) in consultation with the Pennsylvania Recreational Trails Advisory Board (PARTAB), which is composed of both motorized and non motorized recreational trail users.

- **Transportation Equity Act for the 21st Century (TEA 21)**
  On June 9, 1998, the Transportation Equity Act for the 21st Century (TEA-21) authorizing highway, highway safety, transit and other surface transportation programs for the next 6 years was signed into law. TEA-21 builds on the initiatives established in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). TEA-21 continues and expands provisions to improve facilities and safety for bicycles and pedestrians, as well as broaden and make eligible NHS funds to include pedestrian walkways, and safety and educational activities. Other changes ensure the consideration of bicyclists and pedestrians in the planning process and facility design. A total of $270 million in contract authority was authorized for FYs 1998-2003 to provide and maintain recreational trails, while a total of $148 million for technical assistance and grants has been allocated for the development of scenic byway programs and related projects along roads designated as National Scenic Byways, All-American Roads, or as State Scenic Byways.

- **Growing Greener**
  [http://www.dep.state.pa.us/growgreen/](http://www.dep.state.pa.us/growgreen/)
  Signed into law in 1999 and reauthorized in 2002, Growing Greener is the largest single investment of state funds in Pennsylvania’s history to address critical environmental concerns. Over the next 10 years, $1.3
billion will be distributed among four state agencies to address a variety of projects. Included are funds available from the Department of Conservation and Natural Resources for state park renovations & improvements.

- **Community Conservation Partnerships Program (C2P2)**
  
  [http://www.dcnr.state.pa.us/recreation/grants/keygrants02-03.htm](http://www.dcnr.state.pa.us/recreation/grants/keygrants02-03.htm)

  Sponsored by the Department of Conservation and Natural Resources and the Pennsylvania Recreation and Park Society the Community Conservation Partnerships Program has developed four grants to meet local recreation and conservation needs. Grants for Planning and Technical Assistance, Acquisition Projects, Development Projects and Federally Funded Projects can be used on a range of projects from rehabilitating a community athletic field, building a safer playground, preparing a watershed or greenways plan to developing an abandoned rail corridor or protecting a critical natural or open space areas.

6. **Private Foundations**

Private foundations are a potential source of funding for heritage resource preservation and funding. The State of Pennsylvania is blessed with a number of foundations that support activities such as arts and education, historic preservation and community development, recreational resources management, and environmental planning and design. The following are a few of the major foundations that provide support for such activities in Pennsylvania.

- **Andrew W. Mellon Foundation** –
  
  Grants for Museums and Art Conservation
  
  [http://www.mellon.org/museumsandconservation.html](http://www.mellon.org/museumsandconservation.html)

- **Bayer Foundation** -
  
  Grants for Civic and Community Programs, as well as Arts Education and Culture
  
  [http://www.bayerus.com/about/community/index.html](http://www.bayerus.com/about/community/index.html)

- **Heinz Endowments** -
  
  Funding for Education, Community Development, and Culture
  
• **Hershey Foods Corporation** -
  Grants for Education, Civic and Community Initiatives, Arts and Culture, and Environment
  http://www.hersheys.com/about/contributions.shtml

• **Land O' Lakes Foundation** -
  Community Grants: Grants for Quality Art Endeavors and to Solve Community Problems in Rural Areas

• **The Ford Foundation** -
  Grants for Community Development, Education, Arts, and Culture
  http://www.fordfound.org/

• **The Pew Charitable Trusts** -
  Grants for Culture, Education, and Environment

• **Wallace-Reader's Digest Funds** –
  Funding to advance Parkland and Community Engagement with Parks and Open-Space.
  http://www.wallacefunds.org/

• **William Penn Foundation** –
  Grants for Art and Culture, as well as Environment and Communities
  http://www.wpennfdn.org/