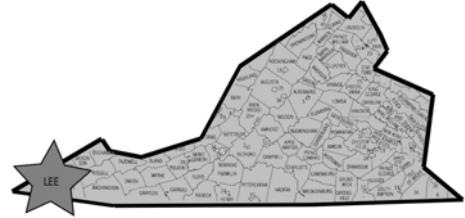


# Stone Creek Tipple Site Reuse Inventory Report Lee County, Virginia

## Executive Summary

Lee County, Virginia, like much of Appalachia, continues to experience impacts associated with the region's rich coal mining heritage. Although coal mining is again on the rise due to increased demand from abroad and a recent emphasis on national energy independence, coal mining-related jobs have not increased as a result of industry automation. At the same time, portions of the landscape of Lee County have been scarred by mining. Acid mine drainage, stream bank erosion, and stream sedimentation have compromised aquatic life in the region's streams. Abandoned coal mines and coal processing and loading facilities blight the landscape.



The Stone Creek Tipple site represents a particular instance of a larger regional problem. This former coal loading facility, located nearly 2 miles from the Town of Pennington Gap, VA, is one of approximately 70 abandoned tipple sites in Southwest Virginia that is potentially available for reuse. While it is a relatively small site – just 1.5 acres in size – it is well suited to redevelopment because it is a flat parcel, is located on a primary transportation corridor, has access to public sewer and water as well as electricity, and has broadband internet available. Cleaning up and reusing the site is not anticipated to have much influence on the local economy, as a site of such limited acreage will have minimal impact. Rather, the chief value of this demonstration project is that a successful redevelopment process will result in a replicable model for addressing mine-scarred sites throughout the region. Successful redevelopment of the Stone Creek Tipple site will demonstrate that abandoned mining-related properties can be reclaimed and reused productively.

Stakeholders in Southwest Virginia expressed two categories of redevelopment visions – one at the site-specific level and the other at the regional level. Stakeholders identified site-specific reuse options including affordable housing, green space, a commuter lot, an outdoor learning center that would be used to build students' capacity to address public health and environmental issues associated with mine-scarred lands, and a coal heritage museum that would complement the outdoor classroom and serve as a tourist attraction. Stakeholders have already leveraged a variety of resources that will contribute to site cleanup and reuse activities.

In terms of a regional redevelopment vision, stakeholders have expressed a strong interest in pursuing Brownfields Assessment Grants or other funding and technical support to develop a regional inventory of mine-scarred lands, conduct assessments of those sites with reuse potential, and plan for the reuse of those properties. An inventory would allow sites to be evaluated on a regional basis to determine their suitability for regional needs such as industrial parks, housing developments, and other critical needs. Such an inventory could yield many redevelopment opportunities beyond the Stone Creek Tipple site while facilitating sound land-use and economic development planning.

Regardless of the redevelopment option that is ultimately pursued, there are several needs to address in order to bring about the reuse of the Stone Creek Tipple site. These include:

- Facilitating a reuse discussion among critical stakeholders to identify any additional reuse options and prioritize the range of options;
- Convening appropriate stakeholders and developing an organizational structure for making site reuse decisions;
- Continuing discussions with the current owner of the property to determine interest in selling the property as well as a fair price for the property. This may require an independent evaluation of the worth of the location for a tipple site as well as an evaluation of current assets on the property.
- Conducting assessments to determine the environmental condition of the property, including the presence of any chemical hazards and the status of stream bank erosion, and determine actions necessary to clean up the site and restore the stream bank.

In addition, to encourage the productive reuse of other abandoned tipples in Southwest Virginia, assistance is needed to accomplish the following:

- Developing an inventory and conducting assessments and planning for mine-scarred lands with reuse potential in the region; and
- Developing a model for evaluating the reuse potential and making reuse decisions for mine-scarred properties in Southwest Virginia.

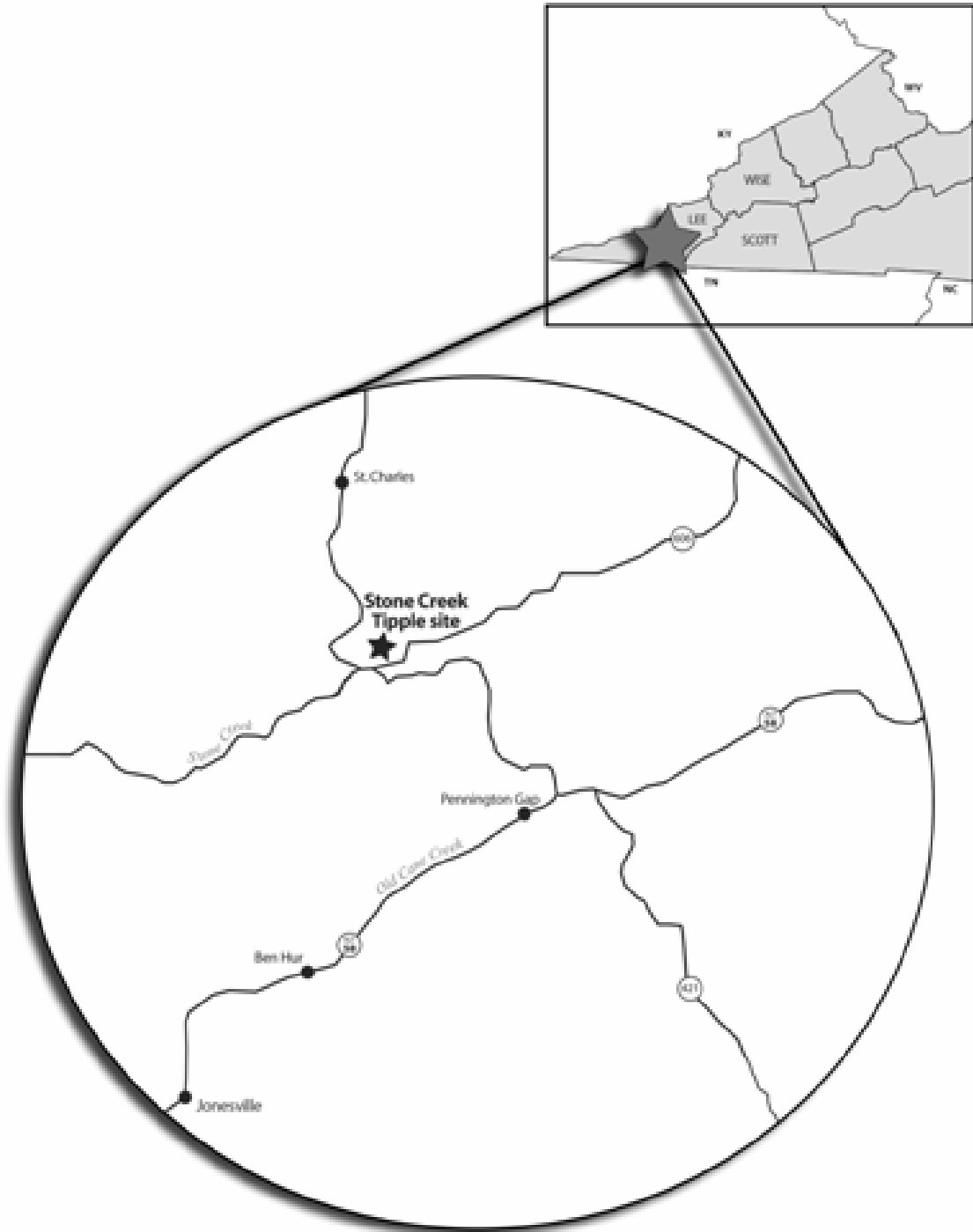
Through the coordinated efforts of stakeholders and focused assistance from the Mine-Scarred Lands Working Group, the approaches used in planning for and implementing the cleanup and reuse of the Stone Tipple site could serve as the launching point for a larger regional effort to inventory, assess, and plan for the reuse of mine-scarred lands throughout the region.

## Introduction

In January 2002, President George W. Bush signed into law the Small Business Liability and Brownfields Revitalization Act that expanded the definition of brownfields to include mine-scarred lands, making these properties eligible for the benefits of the Brownfields Program. Reclaiming and redeveloping mine-scarred lands poses new challenges and requires different approaches to those used to redevelop urban brownfields sites. The Federal Mine-Scarred Lands Working Group was established as a collaborative effort in 2003 to address the challenges associated with the reclamation and redevelopment of mine-scarred lands. The Working Group identified six Demonstration Projects across the U.S. where the opportunity exists to work collaboratively with local communities to provide funding and technical assistance to clean up mine-scarred lands, identify community redevelopment needs, and coordinate action plans. The Demonstration Projects will provide the federal partners with valuable insights and lessons learned related to the unique barriers and opportunities presented by mine-scarred land cleanup and reuse.

This reuse inventory report assesses the current state of community redevelopment processes in Southwest Virginia, generally, and Lee County, specifically. The purpose of this report is to analyze socio-economic conditions in Lee County, present possible reuse/redevelopment options for the Stone Creek Tipple site, and provide recommendations for how federal partners may assist the community in realizing its reuse/redevelopment visions for the site and other mine-scarred lands in Southwest Virginia. This report is based on in-person interviews with various stakeholders that were conducted on a one-day visit in August 2004, and supplemental telephone interviews and background research.

## Important Landmarks



## The Legacy of Mining in Lee County, Virginia

Although considerable progress has been made over the last several decades, the Appalachian region of the United States continues to suffer from economic, social, and environmental challenges relative to other regions. The genesis of many Appalachian communities can be traced to the resource extraction industries. The southwestern portion of Virginia is no exception. For many, the region is known simply as the “coalfields,” and despite concentrated efforts by the state and federal government and other partners (e.g., the Appalachian Regional Commission and the Office of Surface Mining), the negative impacts of the region’s mining heritage are still visible. The obstacles that the coalfields face are numerous mine-scarred lands, poor water quality, threatened species, distressed local economies, and, in general, real or perceived environmental contamination. After mining operations were shut down or dramatically downsized, local economies in Virginia’s coalfields also began to decline. Jobs are scarce, and poverty levels reach well above national averages. Environmental problems such as acid mine drainage hamper the region’s efforts to capitalize on a thriving eco-tourism industry, a trade on the rise in Appalachia.

Of the environmental problems that plague Virginia’s coalfields, the challenges of mine-scarred lands are particularly severe. In addition to a number of priority sites being addressed through Virginia’s Abandoned Mine Lands (AML) program, more than 70 abandoned coal loading facilities, commonly known as a tipples, blight the area as the result of a court ruling that essentially releases many abandoned tipples from reclamation requirements. Mining interests continue to exert a great deal of influence on land use decisions. Many small communities in Lee County have origins as coal camps and there are few large, flat parcels available for traditional economic development (e.g., manufacturing) projects. The location of these communities makes providing basic infrastructure difficult and often exacerbates environmental problems. Runoff from operational and abandoned mines contributes heavy metals and sediments into the streams of these watersheds and impacts both human and animal life. Sedimentation has also led to an increased incidence of flooding throughout the area. Acid mine drainage from these sites impacts the streams and rivers of many watersheds.

A major challenge to the coalfields of Southwest Virginia is the lack of developable land. It is costly and resource consumptive to develop on mountain tops and difficult to provide adequate infrastructure (e.g., roads and utilities) to such development. Many sites away from rivers and streams could be developed, such as abandoned mining sites, but the barriers of land acquisition, cleanup costs, and infrastructure development often preclude local investors and organizations from pursuing the development of mining sites. Thus, mine-scarred lands continue to represent a significant portion of the landscape. For example, in the nearby Guest River Watershed (Wise County), more acreage is occupied by coal tipples, coal loading facilities, and abandoned and active surface mines than by all the communities in the watershed (10,272.4 acres of mining related land vs. 9,003 acres for communities).

## Demographics of the Area

Lee County is the southwestern most county in Virginia with a land and water area totaling 437 square miles and a population of 23,734 people. The county sits in the heart of Appalachia and consists of rugged mountains and rural communities. The county seat is located in Jonesville, VA (population 987) and is located just miles from the borders of both Kentucky and Tennessee. The Stone Creek Tipple site is located two miles outside Town of Pennington Gap, a town with a total population of 1,781.

Poverty rates in Lee County rise well above national and state averages at 23.9%, and the median income is \$22,972. Education levels dip below national and state averages – of the population 25+ years of age, 60.9% are high school graduates and 9.5% have a bachelors degree or higher.

The following industries provide most of the employment in Lee County:

- Educational, health, and social services (24.9%)
- Manufacturing (12.1%)
- Retail Trade (10.9%)

The following are population centers closest to Lee County:

- Roanoke, VA (approximately 200 miles away)
- Knoxville, TN (approximately 150 miles away)
- Lexington, KY (approximately 175 miles away)

The following are transportation corridors located in relation to Lee County:

- Interstate 81 (approximately 50 miles away)
- Interstate 75 (approximately 80 miles away)



*Stone Creek Tipple Site*

## **Socio-Economic Factors**

Within Southwest Virginia's coalfields and Lee County, numerous economic factors have impacted past redevelopment efforts and/or may influence future efforts in the area. Each of these factors, alone or in tandem with others, holds promise as potential engines for economic development in Southwest Virginia's coalfields.

### ***Cultural Heritage***

Residents of the coalfields possess a rich cultural heritage. It is not uncommon for residents of Lee County and the surrounding area to consider the area as distinct from the rest of Virginia. This is caused by distance from population centers, rugged mountains, and rural nature of the area. The region's rich cultural heritage retains native Southwest Virginians and attracts outsiders to the area. In addition, the region takes great pride in its musical heritage. It is the home of American bluegrass music and is the birthplace and home of banjo legend, Ralph Stanley. These musical heritage assets are being capitalized on through recent tourism projects such as the "Crooked Road Music Trail"—a tour of various bluegrass music points of interest through the region.

### ***Aesthetics and Recreation***

Similar to the rest of Appalachian coal country, natural aesthetics and outdoor recreation opportunities make the region attractive to residents and visitors alike. Throughout the region, there are increased opportunities for activities such as mountain biking, hiking, fishing, and other outdoor recreation.

### ***Abandoned Mine Lands with Sufficient Infrastructure for Redevelopment***

Generally speaking, the rugged mountainous terrain of Southwest Virginia tends to limit economic development due to the lack of developable land and access to sufficient infrastructure to support development. The Stone Creek Tipple site and other tipple sites in this area typically have sufficient infrastructure to support a myriad of redevelopment options. The sites generally have access to public water and sewer, power, and rail.

### ***Available Work Force***

The coalfields region continues to make progress diversifying its job base from a resource based economy to alternative sectors such as manufacturing. However, the national trends of manufacturing and other employment loss have been particularly acute in Southwest Virginia, leaving the region with high unemployment rates, and an abundant and able workforce.

In sum, while there is no single economic driver for redevelopment in Lee County and Southwest Virginia, many of the pieces critical to small-scale economic development are already in place. The area is characterized with a rich cultural heritage and history, and is surrounded by beautiful mountains, streams, and rivers. While providing some of the necessary pieces for economic development, the area adds an aesthetic value that can attract future developers and businesses.

## **Regional Framework**

The region possesses effective regional planning and economic development organizations. The LENOWISCO Planning District Commission and Cumberland Plateau Planning District enjoy a successful track record in addressing infrastructure planning and development needs and have been key drivers in innovative projects such as bringing state of the art telecommunications networks to the area. Additionally, the Coalfields Economic Development Authority is a state funded agency that supports the development of industrial and transportation projects while playing a critical role in recruiting new industries to the area. The organizations involve stakeholders at all levels as they work to identify and address regional needs.

## **Background of Areas Impacted**

The landscape of Southwest Virginia is tainted by abandoned coal mines and impaired stream quality from acid mine drainage and stream sedimentation as a result of mining activities. In addition, it is estimated that more than 70 abandoned tipple sites blight the landscape of Southwest Virginia. With improvements in technology and an ever-changing mining industry, mining companies have centralized operations causing the majority of privately owned loading, sorting, and processing sites to become abandoned. As the result of a lawsuit that challenged the state's authority to compel cleanup of a tipple site, the court set a precedent by ruling that loading facilities not contiguous and affiliated with a specific mine are not subject to the reclamation requirements of the Surface Mining Control and Reclamation Act. Most tipple sites are not affiliated with a specific mine while operational, therefore no individual, company, or organization is generally responsible for reclaiming them. These abandoned tipples typically have few controls limiting access to the property, which often contain dilapidated structures and other hazards. Not only do these sites scar the landscape and present potential environmental and human health hazards, they occupy what might otherwise be developable land. Moreover, their presence may stigmatize a community and discourage others from investing in the community.

### **Stone Tipple Site Background**

Located at the intersection of Routes 421 and 606 (two miles northwest of the Town of Pennington Gap), the Stone Creek Tipple site covers approximately 1.5 flat acres and sits on the banks of Stone Creek, which is on Virginia's list of 303d impaired waters with one of the impairments being abandoned mine lands. The site operated periodically as a loading facility through 1996. The site presents an aesthetic blight on the community and poses a potential health and safety hazard to local residents. It has decaying structures and coal loading mechanisms as well as coal waste piles. In addition to coal wastes from the site, there is a possibility of petroleum and PCB contamination. Since its abandonment, the site has been used for illegal dumping and there are electrical transformers, vehicles, and other deposits of unknown origin. The site remains unsecured, creating a safety issue. Stream bank erosion is a major concern during high water seasons because the site sits on the banks of Stone Creek. A formal environmental assessment or an assessment of stream bank erosion has yet to be completed, so the extent of contamination and stream bank erosion is not known.

The site owner has been engaged in discussions with the Virginia Department of Mines, Minerals, and Energy regarding the possible sale of the property. Although the owner has expressed some interest, he has not committed to selling the property. Funding to purchase the site is currently being sought through a grant from the U.S. Fish and Wildlife Service.

## Previous Revitalization Efforts

For decades, Virginia coalfields localities such as Lee County have confronted the challenges of declining base industries through establishing critical partnerships and innovative approaches to economic development. Through their efforts they have made considerable progress to diversify the local economy and shrink the digital divide. Stakeholders in Southwest Virginia have participated in many discussions and engaged in numerous efforts to address the problem of mine-scarred lands in the region. Despite the lack of a formal organizational structure or forum for addressing these challenges, these stakeholders have been quite successful in writing and obtaining grants and bringing other potential partners into discussions. The following table presents some key redevelopment efforts.

Previous Revitalization Efforts		
Project	Description	Partners
<b>2003 EPA Brownfields Assessment Grant Application (Norton City Site)</b>	The Norton Brownfields site is a large site consisting of numerous coal waste piles, two abandoned tipples, and an abandoned surface mine and highwall. The application was not funded.	US Environmental Protection Agency, Office of Brownfields Cleanup and Redevelopment (OBCR); Virginia Department of Mines, Minerals, and Energy (VA DMME)
<b>2003 EPA Brownfields Assessment Grant Application (Regional Site Inventory)</b>	The LENOWISCO Planning District Commission applied for a Brownfields Assessment Demonstration Grant to assess potential Brownfields sites in Lee and Wise Counties. The LENOWISCO application was not funded.	OBCR; LENOWISCO Planning District Commission
<b>2004 Environmental Justice Grant</b>	This EPA Environmental Justice Collaborative Problem Solving Grant was awarded to the Coal County Watershed Coalition and is being used to enhance existing partnerships and create capacity in the three watersheds (Upper Powell, Guest River, and McClure Watersheds). The North Fork Powell participated in the development of the grant and will be included as a partner in future efforts. An OSM VISTA supports this project. Preliminary activities began in March 2004.	US EPA; Tennessee Valley Authority (TVA); Appalachian Regional Commission (ARC); Hands Across the Mountain; McClure and Guest River Watershed Groups; LENOWISCO PDC; Cumberland Plateau Planning District Commission; Office of Surface Mining
<b>Pennington Gap Trails Project</b>	The Town of Pennington Gap is working with the Virginia Tech Community Design Assistance Center to scope out a trail that would connect the town center to its recreational fields and possibly the Stone Creek Tipple site.	Town of Pennington; Virginia Tech Community Design Assistance Center
<b>Coalfields Stream Reclamation and Community Improvement Convening</b>	Through funding provided by U.S. EPA, a neutral party convened and facilitated a meeting in Norton, VA to bring potential partners and stakeholders together to address public health and environmental issues related to mine-scarred lands and sewage disposal in the area. Partners decided to use the three watersheds in the Environmental Justice Grant as the region within which to develop models.	US EPA; TVA; OSM; ARC; Virginia Department of Housing and Community Development (VA DHCD); VA DMME; Virginia Department of Environmental Quality (VA DEQ); LENOWISCO PDC; Cumberland Plateau PDC; Hands Across the Mountain ; McClure and Guest River Watershed Groups



## Visions for Revitalization

While acknowledging that stakeholders expressed a strong interest in developing a regional inventory of mine-scarred lands sites in order to develop a strategy for revitalizing some of these properties, this discussion focuses on the redevelopment visions for the Stone Creek Tipple Site. Although there is no single vision for redevelopment of this site, stakeholders articulated four general concepts; each is focused on feasible redevelopment strategies and perceived needs of the community.

### **Affordable Housing**

As a rural community and with little employment potential, residents are often forced to reside in below average housing that lacks proper water and wastewater systems. The area is faced with an increasing water quality problem that stems from the lack of sewage treatment facilities and adequate private septic systems. This leads to further environmental contamination or public health issues. Because the Stone Creek Tipple site has access to basic infrastructure, public sewer and water, this site lends itself to residential redevelopment. The site is also located in a primary transportation corridor making it easy for residents to commute for employment. Given that the property is small in size and that portions of it are prone to flooding, no more than two structures or four separate housing units could be developed on the site.

### **Green Space**

Since the property size is somewhat small, it is ideal for green space redevelopment. The site would consist of a picnic area with grass fields for outdoor recreation. The green space redevelopment could utilize the site's location on the Stone Creek for both aesthetics and fishing. Due to the site's location on a transportation corridor, it is likely to be accessed and used by community members.

### **Commuter Lot**

Because the Stone Creek Tipple site is located on a major transportation corridor for the area, the site lends itself well to a park-and-ride redevelopment. Many people travel Route 421 from Virginia to Kentucky where their jobs are located. Because car-pooling is popular, many people park their vehicles on the roadside. Development of an "official" park-and-ride lot would discourage the common practice of roadside parking. Being only 1.5 acres and consisting of relatively flat topography are attributes that add to the feasibility of this redevelopment option.

### **Outdoor Classroom**

The Stone Creek Tipple site sits among Southwest Virginia's mine-scarred lands and is representative of a large number of mine-scarred sites throughout the region. The site could be redeveloped into an outdoor learning center to be used to train students on, and build their capacity to address, public health and environmental issues associated with mine-scarred lands. The project would engage the Lee County School System in the development of the outdoor classroom. The project could also be expanded to include a coal heritage museum that would complement the outdoor classroom and serve as a tourist attraction.

Determining the optimal use of the property will require the orchestrated participation of critical state and local partners, many of which are described below.

## **Key Stakeholders**

As previously mentioned, there is a rich history of collaborative efforts in Southwest Virginia. Stakeholders from across the region have collaborated to tackle large and complex problems such as regional economic restructuring and increasing and improving public water systems. Local stakeholders such as municipal and county governments, regional planning commissions, and watershed organizations have been particularly successful at partnering with state agencies such as the Virginia Department of Housing and Community Development and the Virginia Economic Development Partnership. Key federal partners include the Appalachian Regional Commission (ARC), Office of Surface Mining (OSM), and U.S. Department of Agriculture Rural Development (USDA RD). Additionally, the U.S. Fish and Wildlife Service may become a critical federal partner as it considers funding applications for funds set aside as part of a mining settlement with a coal company resulting from a coal slurry spill in 1996.

In terms of the Stone Creek Tipple site, the following local stakeholders would be critical members of a core group to address site cleanup and reuse issues. These stakeholders are quite familiar with one another and accustomed to working together on issues of common concern.

- ***Virginia Department of Mines, Minerals, and Energy (DMME).*** DMME was responsible in part for the Stone Creek Tipple site being nominated as a potential Demonstration Project. DMME has been in discussion with the property owner to discuss the possibility of selling the site and currently has a \$125,000 grant application pending with the U.S. Fish and Wildlife Service for site acquisition and reclamation of the tipple site. Further, DMME has previously worked with the Army Corps of Engineers (USACE) on acid mine drainage remediation projects in Southwest Virginia.
- ***LENOWISCO Planning District Commission.*** LENOWISCO serves the citizens and local governments of Lee, Wise, and Scott Counties by promoting regional cooperation, helping to coordinate the activities and policies of local governments, and providing planning assistance to local governments in all their activities. LENOWISCO has been involved in several of economic development initiatives in the coalfields region of Southwest Virginia and will be a key player in redevelopment initiatives at the Stone Creek Tipple site and other mine-scarred properties in the region.
- ***Lee County Economic Development Authority.*** Because the Stone Creek Tipple site is in Lee County, the Lee County Economic Development Authority will need to be involved in discussions pertaining to site reuse. In addition, if the current owner does decide to sell the site, Lee County will likely acquire the title to the property.
- ***Tennessee Valley Authority (TVA).*** Through its partnership and support efforts with watershed and community development organizations, TVA could play a critical role in the Stone Tipple project and the larger effort of identifying and prioritizing mine-scarred lands.
- ***Daniel Boone Soil and Water Conservation District/Lee County Watershed Partnership.*** Stone Creek is located on the North Fork of the Powell River in Lee County. Staffs from the conservation district/watershed partnership are responsible for obtaining grants associated with the project.

The above constitute those who have an institutional interest in pursuing successful cleanup and redevelopment of the Stone Creek Tipple site. In addition to these critical stakeholders, other critical stakeholders include the Town of Pennington Gap (the municipality closest to the site), the Powell River Partners (a local watershed group), and the community adjacent to the site. This collection of homes is not formally organized, but a representative could be found to participate in site cleanup and reuse discussions.

### **Leveraged Resources**

Stakeholders have succeeded in leveraging resources from a variety of sources, which include:

- The Fish and Wildlife Foundation awarded a \$10,000 grant to the Daniel Boone Soil and Water Conservation District for site cleanup.
- The Virginia Department of Forestry has pledged trees for riparian planting and may be able to provide additional resources for site redevelopment through a small riparian planting grants program.
- The Virginia Polytechnic Institute and State University (Virginia Tech) landscape architecture students have pledged to assist with a redevelopment design that would incorporate beneficial reuses of mined land.
- The Virginia Department of Transportation (VDOT) has committed to performing over 300 feet of stream bank restoration work at the site as a mitigation requirement for VDOT construction activities in the Powell River watershed in neighboring Wise County. This work will employ Rosgin design, which involves natural design methods that aims to revitalize streams and streambanks to as natural configuration and performance as possible
- The Canaan Valley Institute (CVI) has proven to be an effective partner in coal country by providing small grants for water quality improvements that may be applicable to the Stone Creek Tipple site.
- The Coal Country Watershed Coalition includes an OSM Vista position and can add capacity to coordinate the project through direct, grass-roots watershed support.

The successful collaboration among stakeholders in Lee County has leveraged a variety of partnerships and resources that will promote cleanup and reuse of the Stone Tipple site.

## Challenges to Achieving Revitalization Visions

It remains important to distinguish challenges associated with developing a regional strategy for addressing mine-scarred lands from challenges associated with redeveloping the Stone Creek Tipple site. Regarding the former, regional stakeholders would benefit by forging stronger connections between this demonstration project and other efforts taking place in the region. Many organizations have been very successful in providing or obtaining assistance or funding to address various aspects of mining-related problems. For example, the Coal Country Watershed Coalition plans to use the EPA Environmental Justice Problem Solving grant funds to address the inter-related problems of acid mine drainage, mine-scarred brownfields, and inadequate sewage disposal. Other stakeholders have been successful in obtaining funds or providing support to address specific environmental problems associated with mining practices. The key challenge is to integrate these various efforts to increase the regional capacity to deal with the broad range of issues associated with the identification, evaluation, and reuse of developable mine-scarred lands.

With respect to the reuse of the Stone Creek Tipple site, regardless of the redevelopment option that is ultimately pursued, there are several challenges that need to be addressed. For discussion purposes, needs are grouped into the categories below and suggested actions are described. Completing each action may require assistance from federal or other partners.

### **Organizational Support**

Community stakeholders have expressed interest in a variety of reuse options for the Stone Creek Tipple site and there appears to be general support and enthusiasm for an outdoor classroom; however, stakeholders have not conducted sufficient research to determine the best reuse of the property. Currently, there is no organized structure for having a dialogue on and making decisions about reuse options. The community would greatly benefit from facilitated discussions among critical stakeholders to prioritize a range of reuse options, identify all potential stakeholders, and develop an organizational structure for determining site reuse decisions in the short and long term. Such discussions should be limited to small set of stakeholders who would discuss the process for moving forward on site reuse plans.

Reclamation of mine-scarred lands generally includes a variety of funding partners and other critical stakeholders. Local stakeholders, particularly DMME and the Daniel Boone Soil and Water Conservation District, have been very effective at communicating with other stakeholders and moving discussions forward regarding acquisition and reuse of the site. Although numerous stakeholders have been involved in these discussions to date, there is currently no lead person or organization to coordinate the efforts of all partner entities at the Stone Creek Tipple site. Absence of a lead person or organization is at once a testament to the strength of this loose organization of stakeholders as well as a potential weakness. Without a designated lead, stakeholders have made great progress without outside assistance. By designating a lead and obtaining some outside support, these stakeholders might be able to achieve even more than they already have. Should the group opt to identify a lead, training could be provided to the lead person or organization on how to work with multiple partners and how to obtain funding that could be provided to ensure an efficient and timely reuse of the property.

## **Technical Support**

Although there is perceived contamination at the Stone Creek Tipple site, there has not yet been an assessment to determine specific contamination and cleanup needs. Whether through a Targeted Brownfields Assessment Grant or a Fish and Wildlife Service Grant, funding should be provided to conduct an assessment of the property with the purpose of clarifying environmental conditions at the site.

Due to continuous stream bank erosion, the site continually grows smaller in size. Since the site was formally used as a coal tipple, numerous deposits of coal and other perceived contaminants from the operation lay abandoned on the property. With the continued erosion, these potential contaminants will become waterborne and will contaminate Stone Creek and the surrounding watershed. The U.S. Army Corps of Engineers has recently accepted VDOT's proposal to perform stream bank restoration at the site.

Although DMME has held discussions with the property owner, the owner has not yet committed to sell the property. One of the possible obstacles to the sale of the property is determining the market value of the land. Despite all evidence to the contrary, in the recent past the owner based his assessment of the property's value on its viability as a coal-loading facility. To facilitate sale of the property, an independent party should conduct an assessment of the property's viability as a coal tipple as well as a valuation of current assets and liabilities associated with the property. This might provide a common baseline for negotiations on the sale of the land.

## **Regional Support**

As noted earlier, the Stone Creek Tipple site is only one of approximately 70 tipple sites in Southwest Virginia that is available for reuse. This site is indicative of the larger mine-scarred land problem prevalent throughout the Southwest Virginia region. Developing an inventory of mine-scarred lands sites in the region and conducting assessments of and planning for sites with reuse potential is necessary for future redevelopment of these sites. An inventory would allow sites to be evaluated on a regional basis to determine their suitability for regional needs such as industrial parks, housing developments, and other critical needs. Such an inventory could yield many redevelopment opportunities beyond the Stone Creek site while facilitating sound land-use and economic development planning. Attempts to obtain funding for such an inventory have not been successful.

Within the region, two organizations have submitted EPA Brownfields Grant applications that were not funded. Due to the limited amount of funding available for mine-scarred land cleanup and reuse, regional organizations (e.g., DMME, LENOWISCO) would benefit from information on potential funding sources as well as technical assistance on the grant proposal process. The Coal Country Watershed Coalition and the Upper Tennessee River Roundtable are two organizations that have the capacity to support the development of grant proposals. Additionally, the organizational and technical approaches used as part of the Stone Creek Tipple Project could serve as a foundation for addressing the larger regional problem. Technical assistance in ensuring that approaches are replicable and are transferred to a broader base of regional stakeholders would increase the region's capacity to address mine-scarred site reuse in Southwest Virginia.

## Opportunities for Federal Support

Based on the information gathered and presented above, the following challenges to revitalization have been identified along with potential approaches to resolving these challenges.

Objective	Opportunity
<b>Establish an organizational structure for making reuse decisions.</b>	Provide expertise to convene critical stakeholders and develop an organizational structure for making reuse decisions.
<b>Obtain adequate information on redevelopment options.</b>	Provide expertise to coordinate a facilitated dialogue to identify and prioritize reuse options and determine next steps.
<b>Obtain adequate information on environmental conditions and the value of the Stone Creek Tipple site.</b>	<p>Conduct a Targeted Brownfields Assessment at the Stone Creek Tipple site to determine what types of contaminants exist and what measures need to be taken to remediate identified contaminants.</p> <p>After an environmental assessment is completed, provide expertise to conduct an assessment on the property's viability as an active tipple site and a valuation of current assets and liabilities.</p>
<b>Increase capacity in obtaining funding for mine-scarred lands projects.</b>	<p>Provide assistance on developing competitive grant applications.</p> <p>Federal agency representatives provide information on specific programs within their division that can be applied to mine-scarred lands.</p> <p>Provide overview of the brownfields grant application process and provide comments on past brownfields application efforts.</p>
<b>Obtain information on abandoned mine lands and brownfields in the region.</b>	<p>Provide resources or expertise to complete an inventory of mine-scarred lands and brownfields sites with reuse potential, conduct assessments of those properties, and plan for future redevelopment projects.</p> <p>Using the Stone Creek Tipple site as a starting point, establish a framework for evaluating sites against regional development needs (e.g., industrial sites, housing development) and prioritizing cleanup and reuse of sites.</p>

## Summary

The coalfields of Southwest Virginia face an array of challenges associated with its coal mining heritage. Lacking a single sustainable overarching economic driver or engine, facing shortages of easily developable land, and presented with vast amounts of unreclaimed mining properties, the region understands that future economic development will be enhanced by the successful reuse of former mining properties. Toward that end, regional stakeholders have focused their attention on the Stone Creek Tipple site as first step to a larger goal. In addition to redeveloping a specific parcel, regional stakeholders hope that another outcome of this process is the development of a replicable model that can be used across the coalfields to acquire and reuse former mining properties.

This report has identified the opportunities associated with the reuse of the Stone Creek Tipple site. There are several challenges that need to be addressed in order to facilitate reuse of the site. Support of federal partners on the Mine-Scarred Lands Working Group will prove critical to the project's success.