EARTH CONSERVANCY NEWS

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1999 Annual Report To The Community

Earth Conservancy is entering the new century with an array of exciting projects and goals, as well as a long list of achievements of the past year to reflect back upon.

Some of our Year 2000 projects have already begun, while others are in the planning stages or about to be implemented. A unique facet of all current and future EC projects is the connectivity they have with other efforts and initiatives taking place within Northeastern Pennsylvania.

As always, reclamation remains the cornerstone of EC's mission, and reclaiming land and waterways impacted by past mining activity is a top priority. The benefits of reclamation are numerous, including improved environmental health, as well as providing land needed for transportation improvements, industrial and residential development, recreational sites, and greenways.

EC is also involved in economic development initiatives, and has

partnered with state, local, federal and national entities on many projects to ensure the most benefits for Wyoming Valley residents.

It is at this time that we would like to take an opportunity to formally thank EC's Board of Directors, supporters, volunteers, staff, and all of the organizations/entities which provide funding, partnership, and/or professional expertise to EC. Following is Earth Conservancy's Annual Report to the Community for 1999.

ACCOMPLISHMENTS

LAND AND WATER RECLAMATION

Land Reclamation

- > Contracted with several companies to process culm and silt, as part of EC's reclamation efforts. These contracts result in 2 million tons of material being removed yearly from mine-scarred sites for processing, with a yield of about 850,000 tons per year that is used for electric power generation. When the current projects are complete, 230 acres will be reclaimed and available for a variety of uses.
- > Began reclamation of a 63-acre site in Hanover Township that is being developed for a public recreational area. The site is mine scarred and contains a large culm bank area. It has also been vandalized and used for illegal dumping.
- > Completed reclamation of 40 acres on a mine-scarred site along Middle Road in Nanticoke.
- > Partnered with the PA Dept. of Environmental Protection (DEP) on a 39-acre reclamation project in Wanamie.
- > Reforested a 110-acre reclaimed site in Wanamie in conjunction with the PA Department of Conservation and Natural Resources' (DCNR) Bureau of Forestry.
- > Began removal of culm and silt at the Bliss, Loomis,



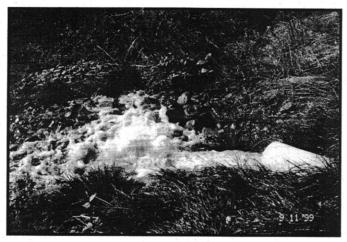
The Loomis Bank area is being reclaimed in a unique way. Northampton Fuel, located in Northampton, PA, removes and processes the culm and silt material from this site, and transports it to its cogeneration plant in Northampton, where it is used for electric power generation.

Huber, and Concrete City sites. The Bliss, Loomis and Concrete City sites are located in the Nanticoke Creek watershed. Reclamation of these sites will further benefit the current stream restoration efforts of the U.S. Army Corps of Engineers (see Watershed Assessment on page 3).

LAND AND WATER RECLAMATION cont.

Water Reclamation

> Completed the Phase II constructed wetland site and began treating abandoned mine drainage (AMD) at the Askam Borehole. EC now monitors this site to determine the iron removal rate. Current readings show that Phase II is removing 96 percent of the iron hydroxide present in the water, resulting



The success of EC's Phase II site is evidenced here. After its journey through the constructed wetland, the water is returned to Nanticoke Creek, in a much cleaner and clearer state than when it first entered.



EC's Phase II Wetland site has been treating mine drainage from the Askam Borehole since the Spring of 1999. Recent water quality testing shows that this wetland is removing more than 96 percent of the iron that is present in the water when it first enters the site.

in cleaner water being returned to Nanticoke Creek.

Both of EC's Phase I and Phase II wetland sites have been increasingly used by local school and university teachers to supplement their classroom curriculum. Tours of the sites are continually offered by EC to any interested groups.

WATERSHED ASSESSMENT/ RESTORATION WORK

> Teamed with the United States Geological Survey and Wilkes University on assessments of the Newport Creek and Nanticoke Creek watersheds. Gauging stations were installed at critical points throughout these two watersheds to measure water flow. The goal is to determine the amount of water lost in these watersheds due to percolation into underground mines, which eventually resurfaces and returns to tributaries in the watersheds as AMD.

> EC will use data from the USGS project and work with the U.S. Army Corps of Engineers to identify cost-effective projects that restore stream flow and water quality in the Nanticoke Creek

Watersheds. Restoration will most likely involve sealing streambeds, realigning stream segments, and land and water reclamation (i.e., culm removal, creating wetlands) within the watershed area.

The goal of restoration work/ projects is to eliminate iron concentrations in waterways by reducing the amount of water that flows through contaminated abandoned mine areas and creating wetlands to treat AMD-impacted water. The aquatic and riparian ecosystems within the Nanticoke Creek watershed would also benefit, allowing for the reestablishment of fishery, macroinvertebrate, and amphibian communities.

RECREATIONAL AMENITIES

Ashley Planes Heritage Park

> Obtained a \$1 million Transportation Enhancement Program grant from the PA Department of Transportation (PennDOT) to construct a historical park at the 500-acre Ashley Planes site. This park is a major component of EC's Lower Wyoming Valley Open Space Master Plan.

The goal is to combine the unique natural features at the site, such as scenic wooded areas and waterfalls, with the cultural/historical artifacts such as the historic ruins and structures still there, into a hiking/biking trail network. In addition to trails, an environmental/cultural center and picnic areas will be part of the concept.

cont. page 3

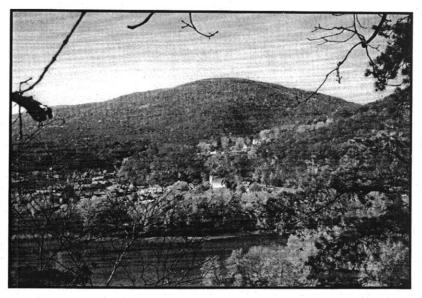
RECREATIONAL AMENITIES cont.

Luzerne County Recreation Area

> Started reclamation and construction of a 10-acre portion (Phase I) of this 63-acre public recreational area in Hanover Township, adjacent to Route 29. It is proposed that the site be developed in three phases and offer residents regulation-size soccer fields, baseball and Little League fields, basketball and tennis courts, a walking trail and a community recreation center.

Recreational Trails

- > Surveyed the Mocanaqua Loop, a 3.3-mile trail on the northern reach of Penobscot Mountain. This trail will take users to the ridgetop area, where they can enjoy spectacular scenic views of the river, surrounding mountains and historic valley communities. This trail is also the first third of EC's proposed Escarpment Trail, a 9-mile trail connecting Mocanaqua to Nanticoke.
- > Applied for state and county grants needed for construction of additional trails throughout the



The Mocanaqua Loop Trail planned by EC will offer hikers various points of natural interest, as well as impressive views, such as this one, which showcases the Lower Wyoming Valley's rolling mountains, the Susquehanna River, and the small, quaint communities that comprise much of our region.

Wyoming Valley, including the Escarpment Trail, the Newport Cross Valley Trail, and the Penobscot Ridge Mountain Bike area. These trails will provide an alternative transportation route to existing and proposed recreational amenities and valley communities.

LAND DEVELOPMENT OPPORTUNITIES

The Mixed-Use Plan

> Developed a conceptual master plan for the mixed-use development of approximately 2,000 acres involving a creative integration of industrial, commercial, residential, recreational, and green spaces along the State Route 29 corridor in Hanover and Newport Townships and the City of Nanticoke.

The plan's main objective is to foster economic development and improve the region's quality of life by developing land in ways that create a vibrant living environment in which residences, workplaces and recreational amenities are in close proximity (ideally, walking distance) to one another. The result of this is expected to attract quality employers that offer challenging jobs with family-sustaining wages. This plan

was designed in conjunction with the new Hanover Crossings Business Park planned by the Greater Wilkes-Barre Chamber of Business and Industry. Hanover Crossings will be the first outgrowth of the Mixed-Use Plan.

Keystone Opportunity Zone

➤ 859 acres of EC land was included in Pennsylvania's KOZ program. EC's participation in this program helped stimulate development of the future Hanover Crossings Business Park and will help attract more businesses and industries to the Wyoming Valley.

Transportation Initiatives

> EC initiated a conceptual design for a Sans Souci/LCCC Connector Highway linking the Sans Souci Parkway to Middle Road, near Prospect Street in Nanticoke and adding a new exit to Route 29 to access Luzerne County Community College. In 1998, this new highway was funded for \$23.6 million and included in the State Transportation Commission's 12-Year Plan. EC's Mixed-Use Plan recommended changes in alignment and the termination point for this highway.

In October, 1999, EC requested an additional \$7 million from the State Transportation Commission to fund these changes. This new road system will ease traffic congestion along Middle Road and increase the safety and efficiency of existing roadways. It will also create a new and better access to Luzerne County Community College and to land for reclamation and development.

RESIDENTIAL DEVELOPMENT

- > Received contingent subdivision approval from Sugar Notch Borough for the Woodland Road residential subdivision and began marketing it to potential developers.
- > Finished plans for and began marketing the Cherry Lane subdivision in Hanover Township.

COMPOSTING

> Began a pilot study program of recycling wood pallets by grinding them and then composting the material.

GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

> Joined the GIS Consortium, which has been initiated to combine the GIS knowledge and capabilities of numerous regional entities to provide a comprehensive geographical information database, in conjunction with the American Heritage Rivers program for the Upper Susquehanna/Lower Lackawanna Watershed.

COMMUNITY OUTREACH/EDUCATION

- > Initiated a community-wide volunteer tree planting program that resulted in the planting of 3,500 seedlings on reclaimed lands by local schools, college students, community volunteers and the Wyoming Valley Sanitary Authority.
- Secured a grant through DEP's Watershed Restoration and Partnership Act to produce a professional, educational video on the Wyoming Valley's abandoned mine drainage (AMD) problem and successful treatment methods. This video will be distributed to local school districts interested in incorporating AMD instruction into their science curriculum. It can be used alone or in conjunction with tours of EC's constructed wetland sites.
- > Organized several litter and tire clean ups on or near EC properties to increase awareness of illegal dumping throughout the region and promote individual environmental responsibility.
- > Conducted tours of EC's constructed wetlands and project sites to interested groups.



EC spearheads various community outreach initiatives, such as this volunteer litter clean-up, that aims not only to make area residents aware of the environmental problems plaguing our region, but to make them part of the solution as well.

- > Participated in local educational outreach initiatives, such as career fairs, Junior Achievement, and local seminars/conferences.
- > Gave presentations to several interested school and community groups about EC, its mission, the importance of environmental restoration, and responsible land use.

ADDITIONAL ACCOMPLISHMENTS

- > Adopted the tag line, "A Not-for-Profit Corporation for Conservation and Land Revitalization in the Wyoming Valley," to clarify EC's goals and activities.
- > Established a website, www.earthconservancy.org
- > Partnered with the Delaware and Lehigh National Heritage Corridor to conduct a feasibility study on the preservation of the Huber Breaker.
- > Received a second consecutive Waste Watchers Award from the PA Waste Industries Association, the Public

Recycling Officials of Pennsylvania, and the PA DEP.

- > Garnered second place in the Pocono Northeast Development Fund's Community Award Program, in Environmental Action for the volunteer tree planting initiative.
- > Received a Certificate of Environmental Achievement for Growth Management/Regional Planning from Renew America.

GOALS_

LAND DEVELOPMENT/ TRANSPORTATION

- > Complete the next phase of the Mixed-Use Land Development Project Master Plan, with a focus on financing and marketing strategies.
- > Support construction of a new roadway connecting Exit 46 of Interstate 81 to Route 115. This project is already included in the state's Twelve-Year Transportation Improvement Program, with work slated to begin this year. About \$3 million dollars in funding has been secured for this project. This new roadway will create access to developable land and land in need of reclamation around the Exit 46 corridor.
- > Develop, in partnership with Luzerne County, a conceptual land use plan for the area surrounding the corridor between Exit 46 and Route 115 on the west side of Interstate 81.

LAND RECLAMATION

- > Complete all necessary reclamation on the first phase of the Luzerne County Recreational Area.
- > Work with the PA DEP to reclaim 46 acres in Hanover Township and 50 acres in Plains Township.
- > Continue working with private interests to reclaim existing EC-owned culm banks and silt ponds.
- > Pursue funding through Gov. Ridge's new Growing Greener initiative for reclamation of the Preston and Huber bank areas.

WATER RECLAMATION

Use data collected from the USGS project and work with

- the U.S. Army Corps of Engineers on a project to identify a cost-effective project that successfully restores stream flow and water quality of the Nanticoke Creek Watershed. This restoration would likely involve sealing streambeds, realigning stream segments, and land and water reclamation (i.e., culm removal, creating wetlands) within the watershed area.
- > Continue regular monitoring of the performance of EC's constructed wetlands to ensure optimum AMD removal in the Nanticoke Creek watershed, as well as water flow and quality throughout both the Nanticoke Creek and Newport Creek Watersheds.

RECREATION

- > Develop a conceptual master plan for the Ashley Planes Heritage Park and obtain a commitment for its ownership and maintenance.
- Obtain funding for construction of the Mocanaqua Loop Trail.
- > Complete construction of Phase I of the Route 29 Recreational Area.
- > Secure funding for and begin development of the Escarpment Trail.

Earth Conservancy News

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Earth Conservancy is a private, non-profit, 501 (c)(3) corporation.

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Our Mission

Earth Conservancy, a non-profit organization committed to the revitalization of 16,300 acres of former coal company-owned land, will plan for its most productive use and manage that land for the next 20 years.

Over 10,000 acres of Earth Conservancy land will be committed for open spaces and recreational purposes.

Working cooperatively with local, state and federal agencies, governments, educational institutions, and local residents, Earth Conservancy will return these abandoned lands into productive assets for the communities in which they lie.

Reclamation, conservation, responsible development and recycling will be employed for this purpose.

Innovative environmental technologies will be used to improve the quality of the land and water. Knowledge will be shared with students, learning institutions, and interested community groups.

Earth Conservancy's actions will improve local tax bases, help create new and better jobs, and develop and apply new environmental technologies.

EC is a private, non-profit, 501(c)(3) organization. Officers of the corporation are: Dr. Christopher Breiseth, Chairman; Mark Dingman, Vice Chairman; Susan W. Shoval, Secretary; Harold C. Snowdon, Jr., Treasurer; Michael Dziak, President and CEO. Other board members are: Margaret Bakker, Stephen Barrouk, Joseph Hillan, A. Peter Kanjorski, James Manley, John McCartiny, Jr., Robert Mericle, Edward Schechter, and Rhea Simms.

Board meetings are open to the public and usually held the first Thursday of each month at 8 a.m. at Earth Conservancy's offices, 101 S. Main St., Ashley.

* Check the Times Leader and Citizens Voice newspapers for notices of upcoming meetings/scheduling changes, or EC's website at www.earthconservancy.org. Go to the EC Info link.



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