Asset-based Opportunity:

Retooling Old Structures into New Uses

Turning lemons into lemonade is a favorite phrase from childhood. Now, as raw resources become scarce or abandoned buildings blight the countryside, community leaders understand and seek the power of adaptive reuse. Converting old buildings, recycling products and conducting massive environmental cleanups have stimulated new life into tired communities.

Tennessee Overhill Heritage Association © 2004


David Fattaleh / WV Tourism

"If smart growth in the form of environmental protection and community development is the destination, then economic development is the vehicle for getting there…Development of our local brownfields has occurred in a variety of ways. Environmental factors alone did not necessarily control the brownfields redevelopment process…In most cases economic factors were the prime determinants of each project. Our local brownfields reclamation projects offered the best opportunity to not only recycle land, but also to better utilize existing infrastructure, e.g. roads, sewers and utilities."

-- James R. Williams, Brownfields Program Manager for the Chattanooga-Hamilton County (Tennessee) Air Pollution Control Bureau, testimony to the U.S. House of Representatives' Transportation and Infrastructure Subcommittee on Water Resources and the Environment, March 2001

Highways initially designed to move people rapidly through the region now foster a meandering mentality in motorists as these roads receive recognition for their vistas. Many sections of the Appalachian Development Highway System (ADHS) have become attractions in their own right. For instance, ADHS Corridor L – part of U.S. Highway 19 in West Virginia – helps bring whitewater rafting enthusiasts to the area. It also lures visitors along its route to experience the seasonal landscapes and New River Gorge Bridge, one of the state's most photographed structures. Twenty highways throughout Appalachia have been designated National Scenic Byways or All-American Roads by the Federal Highway Administration.

Flat surfaces, such as landfills, provide a perfect tableau for redevelopment. Old coal mines are now being converted for new uses. The region can compete globally by designing market-driven solutions from perceived problems or liabilities.

Gone Fishing

"We've been totally dependent on coal," says Mike Whitt, executive director of the Mingo County (West Virginia) Redevelopment Authority, "and we've got to find new jobs and a new tax base if we're going to continue to live here."

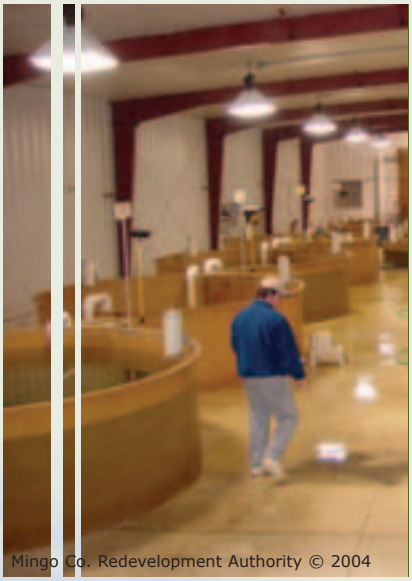
So, local officials decided to take another look at what coal mines produce. The answer was clear: ***water***, lots of it. And in Southern West Virginia, the water runs abundantly clear and cold. These two ingredients are essential to fish farming, especially high quality breeds such as the salmon-like Yukon Gold™ Artic Char.

In 1999, the Mingo County Redevelopment Authority built an artic char hatchery using water from an abandoned section of the Mingo Logan Coal Mine. The mining and land companies (Mingo-Logan Coal and Pocahontas Land Corporation) donated approximately $150,000 of in-kind contributions, matched by funds from both the West Virginia State Legislators and USDA-Rural Development, to ready the facility. It was stocked with 188,000 eggs in 2000, using the market-proven Artic Char as its inventory.

Grow-out farms take the char when they mature at five to seven inches. Places such as West Virginia Aqua, a consortium of mining companies and landowners, provide homes for the fish until they are market ready. "Ultimately, we'd like to see grow-out farms in neighboring counties, employing 100 people," said Mike Whitt. "Our goal is to diversify the industry base and provide a wealth of career opportunities for local residents."

West Virginia Aqua shipped approximately 300,000 pounds in 2003 and estimate shipment of approximately 400,000 pounds in 2004. "There are presently 10 employees at the hatchery and grow-out facilities. The new processing facility began operation in early October, creating another two to three jobs initially, and jobs will increase with market growth. Presently, there are 600,000 fingerlings at the hatchery. At the end of October, these are transferred to the grow-out farm. West Virginia Aqua has another 600,000 eggs ordered for the hatchery in late 2004, and plans are nearly complete to construct another grow-out farm somewhere in the southern coal fields, utilizing abandoned mine water.

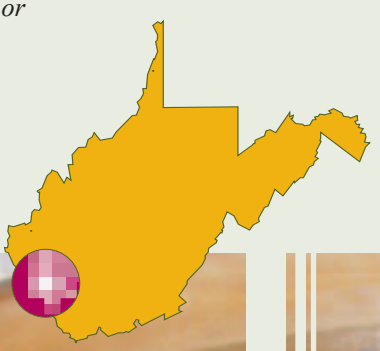
"This is the largest batch of eggs that's ever been brought to the hatchery at one time, and the market looks very promising for West Virginia Aqua to expand its production into other nearby counties. We are very optimistic that within the next decade, we can have a



cottage industry developed in the southern coal fields region which will accomplish one of our goals of diversifying our economy by taking our natural resource assets and converting them into job-creating, tax-producing and prosperous industries," said Whitt.

The Freshwater Institute helped Mingo County and West Virginia Aqua to overcome obstacles associated with fish farming through its research and development programs. The Shepherdstown-based company has also conducted demonstration projects in other parts of Appalachia, and provided technical assistance to the Fingerlakes Aquaculture's tilapia farm. The New York fish farm, founded in 1996, has the capacity to provide about one million pounds a year and employs 10 people.

To learn more about this project, contact Mingo County Redevelopment Authority in Williamson, West Virginia at (304) 235-0042 or www.mcrda.org



From Gas to Greenhouse

Americans throw away an average of 4.5 pounds of trash per person every day. What happens to this waste? Most goes to landfills, where the decomposition process creates methane gas. Methane gas traps 21 times more heat per molecule than carbon dioxide, so it can be dangerous at high concentrations. Many landfills "fill up" due to space limitations or concern about methane build up. What do communities do when their landfills close? Increasingly, communities turn to the EPA's Landfill Methane Outreach Program (LMPO) to find new uses for old dumps.

When the Mitchell-Yancey County Landfill in Western North Carolina closed in 1994, a non-profit organization formed to demonstrate the responsible use of landfill gas as an energy source for small enterprise in craft and horticulture, and to meet local energy needs. In 1999, **Energy Xchange** converted a portion of the six-acre 350,000-ton site into four greenhouses, three cold frames, two craft studios (one for clay and one for glass), a public gallery and a visitor center.

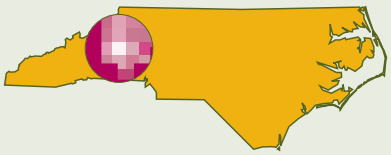
At the landfill, **Project Branch Out** propagates rare and native flora of Western North Carolina and provides a variety of educational opportunities for students, growers and plant enthusiasts. Staff are re-introducing native rhododendrons and azaleas to landscaping and horticulture companies.

An incubator program was established to support entrepreneurs starting, managing and operating new businesses in blown glass and pottery. Craft residencies are available for artists to work in studios at a nominal cost, and include business training from HandMade in America and Mayland Community College. The clay kiln and glass furnaces are fired with landfill gas at no additional cost to the artist residents, with a projected savings over the life of the project estimated at over $1 million.

Energy Xchange has been a model for other regions, and the University of North Carolina-Asheville has just announced plans to build its new craft school on the Buncombe County Landfill. Neighboring Avery County also plans to convert its landfill to studios, focusing on wood and horticulture.

For more information about Energy Xchange, contact 828-675-5541 or visit www.energyxchange.org

Energy Xchange © 2004



"This is the first glass shop in history that hasn't been harmful to the environment."

-- John Geci, Glassblower

Energy Xchange © 2004

WV Tourism

Revitalizing Main Streets

Across Appalachia, towns large and small are restoring old commercial districts into vibrant and varied uses. The restored Elkin Theatre brings people to **Aberdeen, Mississippi** for movies on Friday night. When The Works Pizza Restaurant opened last year in a restored public works building behind City Hall in **Loveland, Ohio**, it helped revive downtown by attracting new businesses and customers. A Smithsonian "Museums on Main Street" exhibit will soon enhance the cultural offerings in restored **Bridgeport, Alabama.**

Several Appalachian communities are winners of the coveted "Great American Main Street Award" designated annually by the National Main Street Center (www.mainstreet.org), a division of the National Trust for Historic

Preservation. **Morgantown, West Virginia** received the accolade in 1998; **Greenville, South Carolina** shared the honor with **Rome, Georgia** in 2003.

Downtown revitalization usually occurs through new design and rehabilitation, beautifying streetscapes, promoting unique retail and dining experiences, erecting wayfinding systems, and providing a distinctive and safe environment for residents and visitors.

Riding the Rails

In southeast Tennessee a group of local citizens, representing economic development and preservation organizations as well as local governments, collaborated to save an 1890 railroad that cuts through the Hiwassee River Gorge between Etowah and Copperhill.

The Old Line Railroad Coalition formed in 2001 when CSX announced its plan to abandon the line and salvage the materials. Glenn Springs Holding provided a loan in the amount of $1.6 million that made the acquisition possible. The Tennessee Overhill Heritage Association (TOHA), a cultural tourism organization that helped form the Old Line Railroad Coalition, is the current owner.

The Southeast Tennessee Development District immediately began work to assist with development of passenger and freight service on the line. They worked very hard with the local communities to save this line because, as officials say, "We are in the business of building infrastructure, not tearing it out." When the Tennessee Valley Authority realized that the most cost-effective and least troublesome way to access the Appalachia Powerhouse was the Old Line RR, the federal agency rehabilitated 13 miles of the line to gain access to the plant.

Soon after, Tennessee Valley Railroad became an active partner and, in partnership with the City of Etowah, began to offer travel excursions on the newly upgraded 13-mile section. Last May, 5,040 people rode vintage passenger cars alongside the Hiwassee Scenic River on the Old Line RR. Seven weekends of excursions are scheduled this fall carrying a potential 8,000 passengers.

In addition to the excursions on the old rail line, local leaders are developing industrial uses. Negotiations are currently underway for large amounts of calcine to be shipped from a site at Copperhill to several domestic and international markets, including China.

"Just as we could not predict the vast economic and social changes that the automobile or Internet would bring to the 20th century, we probably can't accurately predict what kinds of economic and social changes might occur in the 21st century. Who knows, we just might need a fine old mountain railroad."

-- Linda Caldwell, executive director of Tennessee Overhill Heritage Association

TOHA values the Old Line RR for a number of reasons. First, it holds great historic value and is currently being surveyed in preparation for nomination to the National Register of Historic Places. Secondly, TOHA is convinced that no one can predict today what changes in transportation might emerge in the coming century.

For more information about the Old Line Railroad, contact the TOHA at www.tennesseeoverhill.org