

Living Story Webs of Art and Energy

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Presentation Proposal

Jackson County, North Carolina is a rural mountain community tucked inside the beautiful Smokey Mountains with a population around 41,000. Like many older landfills, Jackson County's old 9-acre landfill was not lined. Thus after collecting 750,000 tons of waste the landfill was capped off in 1996 to minimize pollutants leaking into the ground and surface water. Gas extraction wells and pipes and flare stations were installed on the cap to burn off the landfill gas, which contains roughly 68% methane, 30% carbon dioxide and 2% trace gases. However, the temperature of the flares is not hot enough to burn off the cancer causing harmful chemicals, such as benzene, dichloroethene and dichlorobenzene, in the trace gases. As the county government explored solutions, the concept of a Green Energy Park was born in 2006 as a way to address the problem, take advantage of the gas' energy, and support the Western Carolina mountain arts traditions and culture.

The Jackson County Green Energy Park (JCGEP) transforms methane gas extracted from a small old landfill into renewable energy to power diverse forms of heat art activities, such as glassblowing, blacksmithing/metal forge and foundry, and pottery. The glass and metal working equipment, which operates at an average temperature of 2200 to 2400°F, burns off those harmful trace gas chemicals. In the mountains, county also constantly cleans up fallen trees and limbs and the solutions to dispose them had always been a typical 'bonfire'. However, burning wood at a bonfire temperature (700 - 1000°F) releases not only carbon dioxide, but also carbon monoxide and soot particles, which are harmful to human health. Pottery kilns burning at a temperature over 2400°F solves this problem.

Because of these innovative, environmentally conscious, and community value-added practices, JCGEP has been the model for many small rural landfills as they face similar challenges that are different from larger landfills.

However, in 2017, this socially and environmentally valuable operation is at risk of being shut down by Jackson County. The reason? First, the county believes JCGEP has not provided enough value back into the community since inception to justify its average annual budget of \$178,000. Over the past seven years, the need to strategically enhance JCGEP's efficiency, sustainability, accountability, and community value has become apparent and gained increased attention within Jackson County government. Second, JCGEP has not accomplished the multiple improvement plans proposed. Finally, the county also needs solutions to address other pressing needs, such as a suitable relocation for the animal shelter.

On the other hand, although appreciative of the county's support, JCGEP believes that the accomplishments thus far could not have been possible with the current level of support. Instead, much of it was due to the staff's very resourceful tactics such as service exchanges, active search

for material and equipment donations, and partnership with community organizations and educational institutions. JCGEP will be unable to further advance the improvement plans as it was established with the current level of support.

When established, the key skills desired by the county to operate JCGEP were engineering and environmental sciences and with limited financial resources, this technically and scientifically talented individual the county appointed had to take on multiple responsibilities, many outside of his comfort level and skill sets. Without a clear and shared vision, value proposition, and performance measures, the improvement efforts have been difficult.

This led to the need for rediscovery and resituation of JCGEP's strategic narrative and why my colleague and I were brought into the project. Our job was to help JCGEP move forward by exploring a strategic partnership between Jackson County and Western Carolina University (WCU) to infuse a new life and create a viable operation that provides value to both the county and university.

To gain an holistic understanding of the multiple realities and their interconnectivities, twenty-five individuals were interviewed during the project representing current JCGEP employees, Jackson County government, Jackson County commissioners, Jackson County Chamber of Commerce, Jackson County Tourism Development Authority, Jackson County Economic Development, Jackson County Public Works, WCU leadership team, WCU colleges (*College of Business, College of Fine and Performing Arts, College of Arts and Sciences, and College of Engineering and Technology*), WCU Center for Service Learning, and WCU Office of Sustainability and Energy Management.

Our presentation will focus on the discovery of the apparent and hidden living story webs that emerged during the project, which shaped and is reshaping the future of JCGEP. It was not part of the plan, but our role as story consultants evolved from a linear external narrative into antenarrative agents of change.