

## **ABSTRACT**

*The Anthracite Coal Region is only a small part of the large scale energy extraction landscape in Pennsylvania. While hydraulic fracturing operations are the most recent extraction process, in the past, it was anthracite coal mining that caused environmental, ecological, and economic concerns. After many years of prosperous extraction of our earth's "black diamonds", the coal mining process has resulted in scarring the area's cultural and natural ecosystems. Degraded, barren and devastated landscapes became the norm in the region. The anthracite coal region is now stamped with abandoned coal mines, new landforms of mining waste and a contaminated landscape of sulfur and iron polluted watersheds. This acid mine drainage is visible in most of the region's streams, but there are resolutions to these hydrological and environmental problems. The purpose of this paper is to define the planning processes that must be enacted in order to successfully reclaim the mining sites, their individual ecologies, and communities in the coal region. This method of research begins with precedent studies of a successfully remediated bituminous coal mine in eastern Pennsylvania, and the planning methods of International Bauausstellung (IBA) Fürst-Pückler-Land for mining sites in Germany. This paper will review the successful remediation work of landscape architects, scientists, and engineers specifically due to community involvement. Innovative designs and planning measures are seen to help rebuild post-mined landscapes into healthy, productive, and reusable land that will economically strengthen and re-energize the community.*