

# **Coal Remining: Review of Duck Creek Watershed and Remining's Role in Mitigating Impacts from Pre-law Legacy Mining in Ohio**

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## ABSTRACT

The study has two distinct parts and goals associated with each. Part I involves an in depth look at remining and reclamation activities in the Duck Creek Watershed, examining available information and documenting the historic land and water data available as well as the most up to date mining activity and reclamation projects administered by the State of Ohio's AML program. Part II involves the program aspect of the study, which includes providing assistance to Ohio's Remining Task Force.

Since the passage of modern day coal mining laws over 38 years ago in Ohio, remining has played an important role in watershed restoration, however this restoration activity has not been well documented in the state. Studying the role remining has contributed to mitigating the affects from past legacy mining on a watershed basis is important and unprecedented in Ohio, and can serve as valuable background information for regulators involved in permitting activities as well as for the general public.

In this study Geographic Information Systems (ArcGIS) is used to synthesis this data and digitally depict the extent and number of remining operations, AML projects, and unreclaimed lands in the Duck Creek Watershed. This land data combined with historic water quality data from sources that included OEPA, USGS, and Land Reborn Study ( time frames from 1973 to 2003), provides a striking contrast in the conditions of the watershed prior to and following the ushering in of modern day mining laws and reclamation programs. The Best Management Practices (BMPs) utilized by the remining operations are also described. The combination of remining, AML reclamation, and the passage of time (attenuation) has resulted in a significant environmental lift to the overall watershed. The project partners include Ohio Coal Association, B&N Coal Company, and ODNR-Division of Mineral Resources Management, and The Ohio State University.