CIERRA KENDALL and MARK FLOOD, Biology Program, Fairmont State University. Fairmont, WV 26554, JIM NEDROW, MIKE MURPHY, AND JOHN CIESLA, Guardians of the West Fork River Watershed, Fairmont, WV 26554. Determination of impairment of Lambert's Run Stream.

Mine drainage has been a serious issue throughout West Virginia due to the large amount of abandoned coal mines. A recent wave of mine closures is further decreasing the resources for mine drainage treatment, and some of the closed mines may have additional water pollution problems. Treatment of mine drainage is one of the largest environmental problems the mining industry faces. Therefore, it is a good time to study mine drainage treatment and to become as efficient as possible at it. This research examines the impairment of Lamberts Run and determines ways to improve the quality of the water. Impairment was determined based on West Virginia water quality standards by collecting stream data upstream and downstream of treatment sites. Collection of stream data included pH, temperature, conductivity, total dissolved solids, salt, and iron content to determine the effectiveness of the stream remediation that has previously occurred. Water samples from each site were collected and mixed into a Coliscan Easygel plate to determine the amount of coliform bacteria present, which causes harm to surrounding ecosystems. Benthic macroinvertebrate data was also analyzed for this stream. From the preliminary data collected, it is determined that Lamberts Run remains impaired despite rehabilitation attempts according to WVDEP water quality standards. Future investigation will focus on how to rehabilitate this stream.