

INTEGRATING VISUALIZATION AND GEOMORPHIC LANDFORMING FOR RECLAMATION IN APPALACHIAN COAL MINES¹

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Abstract: Geomorphic reclamation methods are potentially applicable in many active and abandoned mine reclamation situations. In particular, larger Appalachian surface mines may contain areas that may be better reclaimed with non-traditional landforming and potential post-mining land use methods. To identify and plan such areas, the mine's land use and topographic context must be assessed and considered. Current regulations addressing a mines regional / cumulative impact focus almost exclusively on hydrologic impacts. This paper addresses integrating cumulative hydrologic considerations into larger frameworks along with land use, land cover, topographic / landform and community considerations. Environmental visualization becomes a critical tool in efforts facilitating such integration.

Additional Keyword(s): landforming, environmental visualization, geomorphic reclamation

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