MS Thesis Department of Environmental Science and Policy College of Science George Mason University

Candidate: Karsyn Kendrick Defense Date and Time: April 11, 2022; 1:00pm EST Defense Location: Zoom (please contact espgrad@gmu for Zoom information) Title: The Abandoned Mine Land Program: Examining Public Participation in Decision-Making

Thesis Director: Dr. Younsung Kim Committee: Dr. Diego Valderrama and Dr. T. Allan Comp

ABSTRACT

For centuries, coal extraction and production provided low-cost energy that powered the American economy and produced damage in its wake, leaving thousands of acres of land unreclaimed, transforming landscapes, and disturbing natural ecology (Dixon and Bilbrey, 2015; Zipper and Skousen, 2021). Currently, an estimated 5.5 million people in the Appalachian region live within one mile of an Abandoned Mine Land (AML) site. These sites can pose serious hazards to public health, safety, and the environment while also offering opportunities for public and community participation in restoration of damaged lands and economic development on abandoned mine sites (Larson, 2022). No studies have been done to determine how states and tribes in the AML program engage the public in decision-making. We conducted a review of State and Tribal Reclamation Plans and Annual Evaluation Reports from 2015-2019, an in-depth case study analysis of 4 AML states, and disseminated a survey to community groups in the Appalachian region. We found that while AML states and tribes heavily rely on traditional methods of public engagement such as public meetings, hearings, and comment periods, many AML states and tribes were also actively engaged in activities within their community. We found two postures towards engagement: reactive, in which the state or tribe provides information after decisions have been made, and proactive, in which states or tribes attempt to integrate public involvement into the AML decision-making structure. Finally, we found that major barriers to public participation include lack of information and transparency around AML decision-making and the opportunities for public engagement. We recommend increasing the information and opportunities available to nonprofits and community groups in the region to mitigate this barrier to ensuring effective public participation.