## Introduction

## 1.1 Background

In 2019, the New Mexico legislature appropriated funds for FY 2020 to The University of New Mexico's Bureau of Business and Economic Research (BBER) to investigate the potential economic impact of uranium mine cleanup and assess the workforce capacity for conducting the cleanup work. The funding was first proposed in HB233, as introduced by Rep. D. Wonda Johnson, and later authorized in HB548 (Section 27.A.4). The work was conducted with oversight by the New Mexico Legislature's Indian Affairs Committee. This report summarizes the results of the study.

## 1.2. Purpose of the Study

New Mexico was a principal site of uranium mining in the US from the 1940s until the collapse of demand in the 1990s. Much of the mining activity was in northwestern New Mexico, on and neighboring Native American tribal lands, particularly those of the Navajo Nation.

A legacy of uranium mining is severe environmental contamination, including approximately 1100 abandoned mining, milling, and exploratory drilling sites in northwest New Mexico as well as extensive groundwater contamination. Native, especially Navajo communities have suffered the majority of the consequences of this contamination. Native populations, many of whom were employed in uranium mining operations, also suffered severe economic dislocation following the collapse of the industry.

Significant measures to address the environmental impacts of past uranium mining have emerged only recently. Remediation has been complicated by the difficulties of identifying the parties legally responsible for the environmental damage, as control of mining operations and attached leases frequently changed hands during repeated cycles of boom and bust. Moreover, processes necessary to fund and oversee remediation work have been established only over the past two decades. A hopeful development was the 2015 Tronox settlement, under which the US Environmental Protection Agency (EPA) secured more than \$1 billion to fund the cleanup of 56 sites on or near territory of the Navajo Nation, including the Quivira mine sites and the Shiprock Uranium mill site in northwestern New Mexico.

It is crucial that the communities most impacted by legacy of uranium mining in the state, especially Native communities, benefit economically as well as environmentally from remediation efforts, including those to be funded by the Tronox



Image 1 – The Mount Taylor mine site recently announced official closure. It will now enter into the remediation phase.

settlement. This would include participation of Native-owned firms and employment of Native workers. Support of this goal is the principal intention of legislators sponsoring the funding of this study.

However, there are significant constraints to the participation of these communities in the cleanup of uranium contamination sites in New Mexico. Without targeted efforts, there is a risk that economic benefits associated with environmental remediation will pass by the very communities that for decades have incurred the greatest costs, with wages and profits accruing to companies and workers not principally located in the region.

The purpose of this document is to:

- Estimate potential economic benefits of uranium mine cleanup in New Mexico;
- A Identify the challenges that local businesses and the local workforce face in participating in the cleanup; and
- Recommend actions that the State of New Mexico may take to support the full participation of local communities in remediation work.

This report is limited in three regards.

- The economic impact analysis (EIA) is an exercise to illustrate how cleanup funds would be distributed throughout the New Mexico economic system. It is not predictive of funds secured under current or future settlements or those spent by responsible parties under other consent decrees. The EIA is presented in this document in a manner that allows the findings to be applied to new settlements.
- Funding for uranium cleanup is not always consistently available, nor is it always usable by state agencies. Further, available funding may cover multiple states and mine sites. For example, the current funding from the Tronox settlement covers uranium cleanup sites on or near the Navajo Nation not only in New Mexico, but in Arizona as well, and is being managed by the EPA. The analysis included in this document is limited to sites located in New Mexico, though again it is presented in a way that allows for application to other sites.
- Most importantly, this document addresses only the immediate or direct economic impacts of uranium waste cleanup and does not address longer term and/or broader impacts of contamination, such as provision of community health services or the benefits of a healthier workforce.