

# Black Mesa Mining District Abandoned Uranium Mines

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# Black Mesa Mining District is in the Central Abandoned Uranium Mine (AUM) Region and includes the following chapters:

Black Mesa, Chinle, Tachee-Blue Gap, and Tselani-Cottonwood

#### **Background**

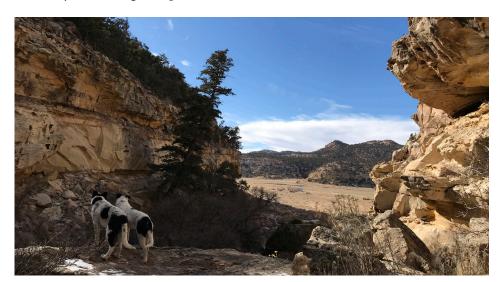
Funds are available to assess all 19 abandoned uranium mines in the Black Mesa Mining District (see map for locations). One mine has been assessed and funds are available to conduct a water study and clean up the mine. Funds are also available to assess an additional 13 mine claims (containing 18 mine sites). These funds are provided by two legal settlements between Navajo Nation and the United States: the Phase 1 Settlement in 2015 and the Phase 2 Settlement in 2016.

Uranium was mined in the Black Mesa Mining District in northeastern Arizona from the 1950s to 1960s. Most mines were surface mines, but two also had underground workings (Claim 7-Claim 10, and Etsitty No. 1). Beginning in the 1990s, the Navajo Nation Abandoned Mine Lands Reclamation Program addressed physical hazards at these mines. The largest producing mine in the district was Claim 7-Claim 10, producing 9,937 tons of ore between 1964 and 1967. The Claim 28 mine was selected for a water study to determine if it is causing water contamination.

### **Settlement Trusts Cleanup Work**

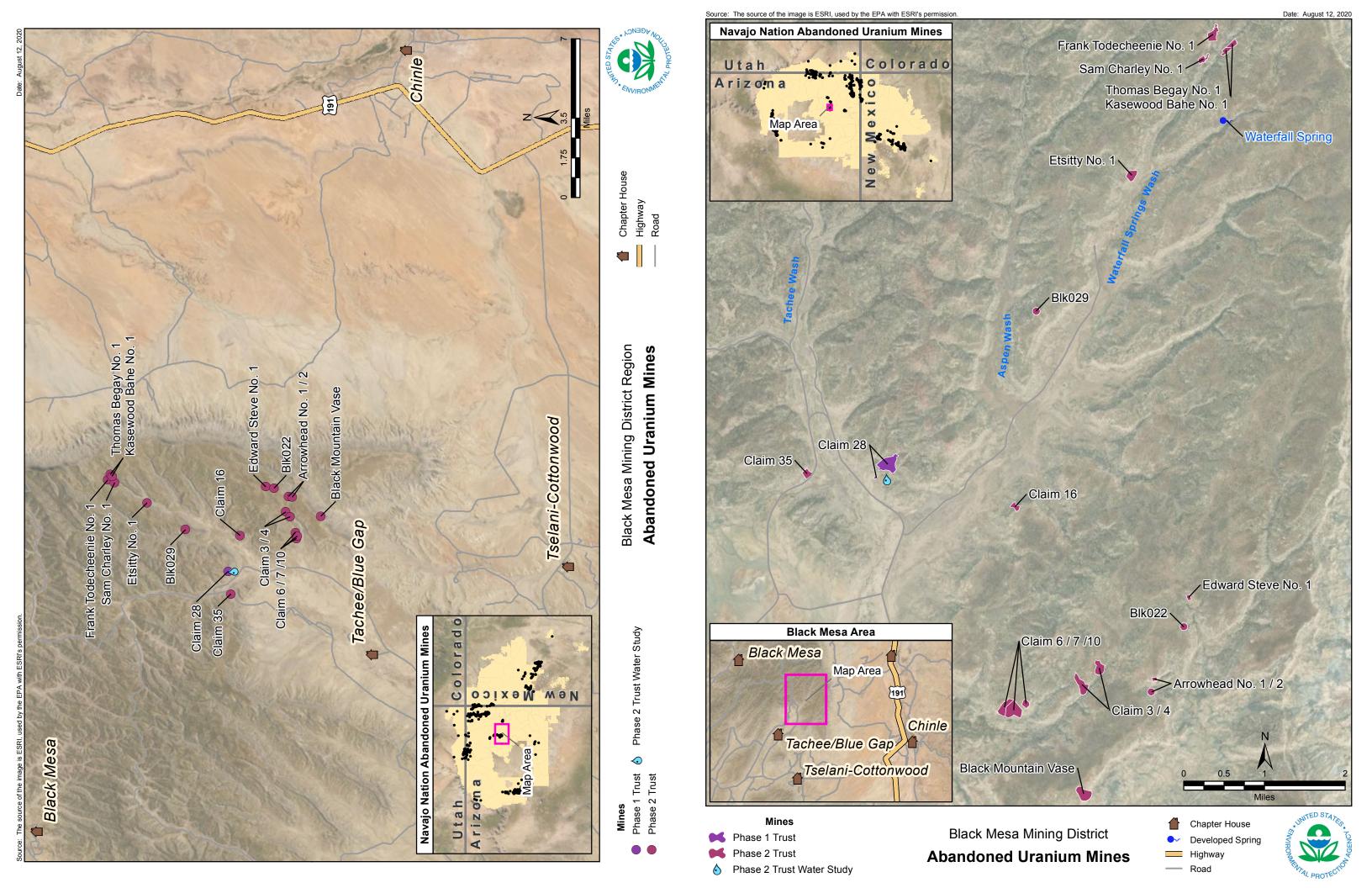
Together, the Phase 1 and Phase 2 Settlements provide funds to assess, conduct a water study at, and clean up the Claim 28 mine in the Tachee-Blue Gap chapter. The United States Environmental Protection Agency (USEPA), in consultation with the Navajo Nation Environmental Protection Agency (NNEPA), named Claim 28 one of 46 "priority" mines for cleanup on Navajo Nation. Concerns over Claim 28's possible effect on water quality and its location close to homes made it a priority for cleanup.1 A trustee for Phase 1, Sadie Hoskie, was selected to conduct detailed assessments under the Phase 1 Trust. The results of the Phase 1 assessments were included in reports called Removal Site Evaluations (RSEs). Results in the Claim 28 RSE were shared with the community in 2018.

The Phase 2 Settlement also provides funds to assess all the remaining mines in the Black Mesa Mining District, and a water study at Claim 28. Derrith Watchman-Moore was selected as the Trustee for Phase 2 assessment and cleanup work. The Trustee Watchman-Moore and Team are also investigating an additional 13 mines in Western Navajo, four mines in Tse Tah, and a water study at the Saytah / George Simpson 1 Incline mine in Tse Tah.



Looking west from the edge of Black Mesa.

<sup>&</sup>lt;sup>1</sup> USEPA and NNEPA prioritized 46 mines (called priority mines) out of the 523 on the Navajo Nation based on gamma radiation levels and proximity to homes, or potential for water contamination identified in the preliminary assessments. The Trust Settlements are responsible for 16 of these 46 priority mines.



#### What Has Been Done?

- The Navajo Nation Abandoned Mine Lands Reclamation Program reclaimed mines by addressing physical hazards.
- The Phase 1 Trustee, Sadie Hoskie, began assessment work at Claim 28 mine in 2015.
- In Summer 2018, Trustee Hoskie, completed the investigation, which included biological and cultural surveys, radiation scanning, aerial photography, and soil and water sampling. The findings were shared with the community in October 2018 and are documented in a RSE report.

#### What is Happening Now?

 Trustee Watchman-Moore has begun work on the water study at Claim 28, including biological and cultural surveys, geologic mapping, and geophysical surveys.

#### **What Happens Next?**

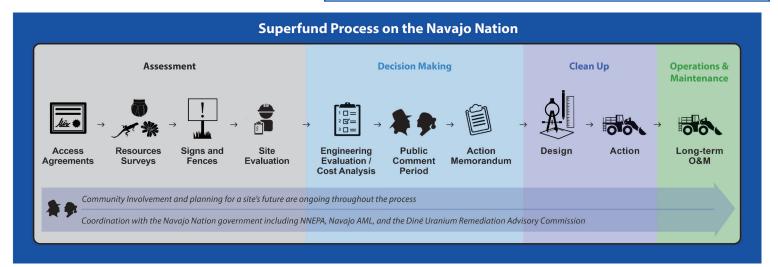
- Trustee Watchman-Moore will prepare plans to assess the remaining 18 AUMs in the Black Mesa Mining District.
- The Trust team will also prepare a work plan for water and sediment sampling at the Claim 28 water study after reviewing the results from the geophysical and geologic studies.
- After an additional legal document is executed, Trustee
  Watchman-Moore will begin the cleanup process at the Claim 28
  mine, beginning with a risk assessment using the results from the
  Phase 1 Trust assessment.



## Reduce Your Contact with Uranium and Radiation

#### Steps to keep yourself safe:

- Stay away from abandoned mines and mills
- Find out if your home is a contaminated structure
- Use regulated water for human needs
- Never use unregulated water for human needs—even if it looks ok
- Use good water hauling practices to keep your water clean
- Get regular cancer screenings, like pap tests, mammograms, colonoscopies, and other cancer screenings



### **For More Information**

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USEPA Navajo Abandoned Uranium Mine webpage: www.epa.gov/navajo-nation-uranium-cleanup

