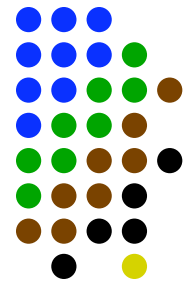


US EPA ARCHIVE DOCUMENT

New Mexico Abandoned and Inactive Uranium Mine Site Assessment & Reclamation Progress

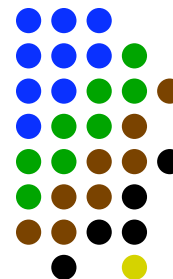


Navajo Uranium Stakeholders Workshop
Gallup, New Mexico
November 4, 2009

Bill Brancard, Director
New Mexico Mining & Minerals Division



Inactive / Abandoned Uranium Mine Inventory Project Phases



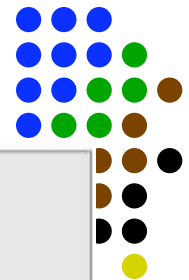
Schmitt Ranch decline



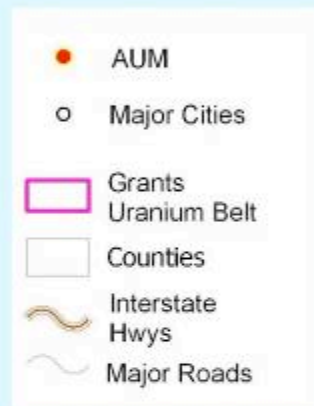
St. Anthony open pit

- ❑ Literature review & data collection
- ❑ Field surveys & site assessments
- ❑ Site prioritization
- ❑ Reclamation design
- ❑ Leveraging resources & partnerships
- ❑ Remediation, reclamation & clean-up

Literature Review & Data Collection

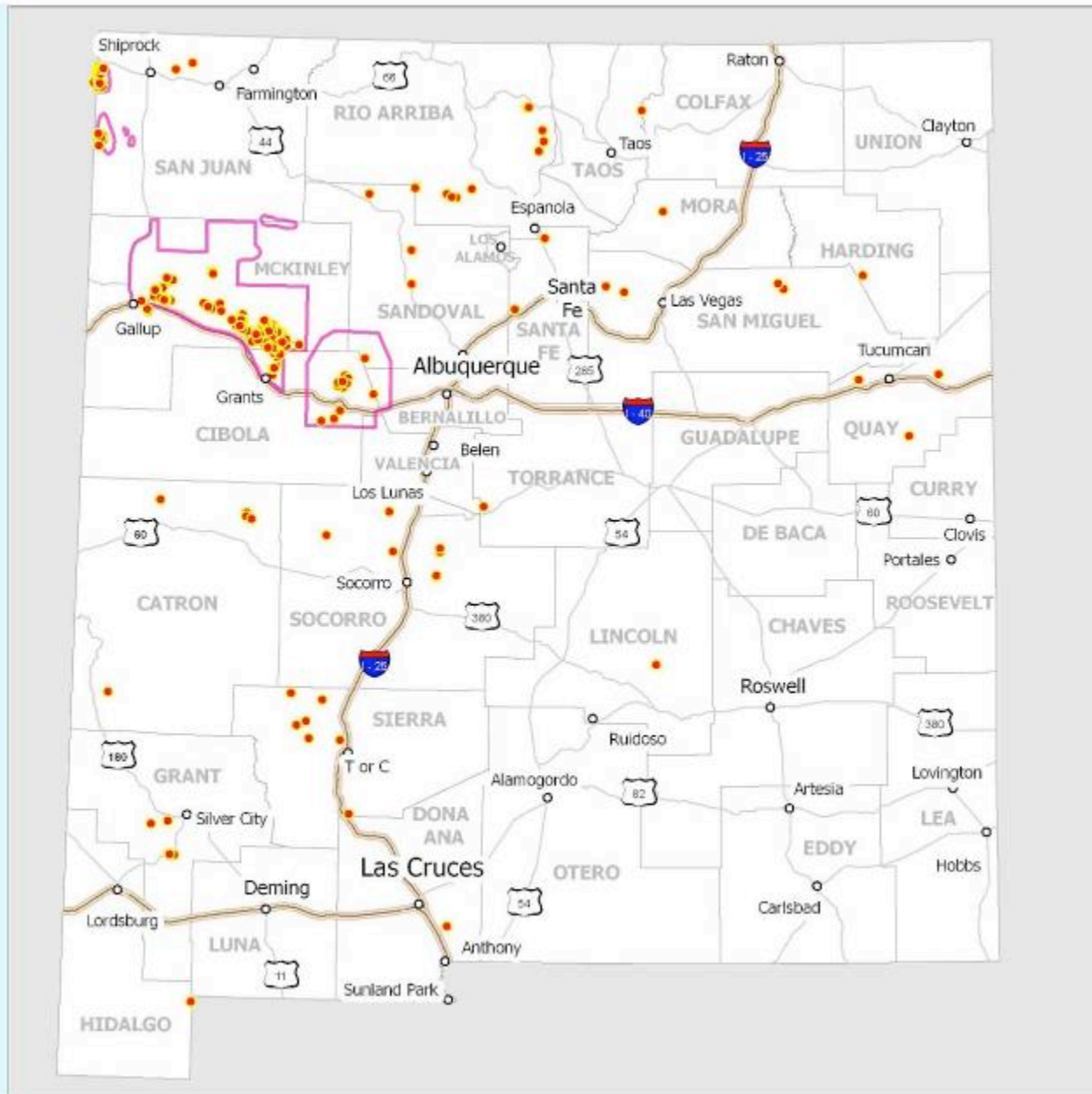


New Mexico
Grants Uranium
Belt and State-wide
Distribution of Abandoned
Uranium Mines (AUM)



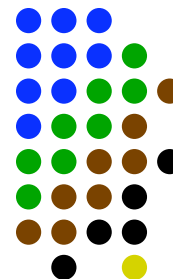
Created by New Mexico
Mining & Minerals, New Mexico Energy,
Minerals & Natural Resources
April 2009

Data: AUMs from Mining & Minerals
Div. (NM Energy, Minerals & Nat. Res. Dep.)
and NM Bureau of Geology and Mineral
Resources; base layers from ESRI and
NM Resource GIS Program
(<http://rgis.nm.edu>), US Census Bureau,



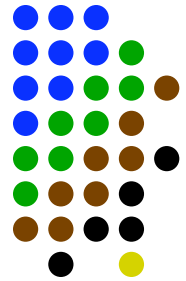
		All AUMs	All AUMs, No Documented Reclamation
Number of mines		259	137
Production (lbs. U ₃ O ₈)	>20 million	1	0
	2 million-20 million	24	3
	200,000-2 million	28	10
	20,000-200,000	35	19
	< 20,000	131	85
	included with other mines	40	20
Surface ownership	Federal	68	48
	Private	78	46
	State	9	9
	Tribal, trust	77	16
	Tribal, allotment	17	16
	Mixed	10	2

Field Surveys

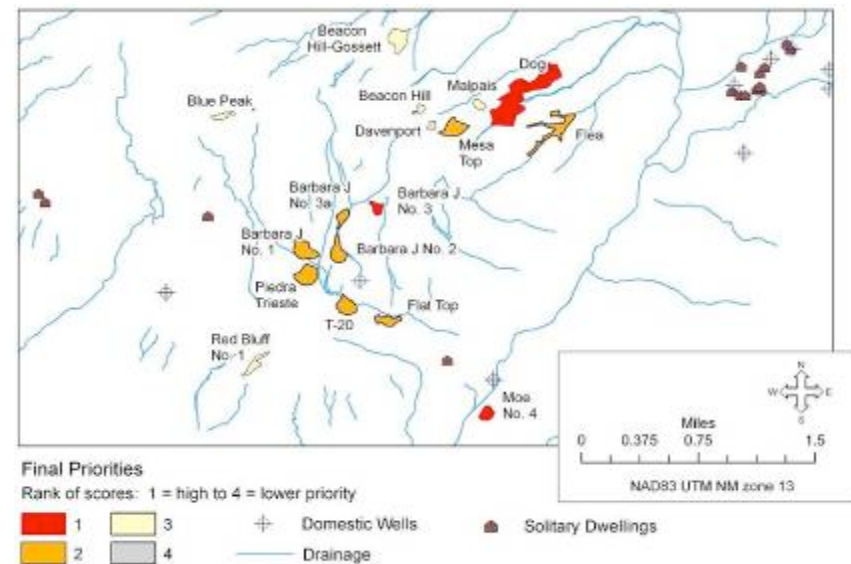


- ❑ **Project assessment and maintenance of previous New Mexico Abandoned Mine Land (AML) projects.**
Surveyed 14 mines in the Poison Canyon area north of Milan and 1 mine southeast of Gallup.
- ❑ **Reconnaissance of mines for possible inclusion in future New Mexico Abandoned Mine Land (AML) projects.**
Surveyed 14 mines on federal and private lands located throughout New Mexico.
- ❑ **2008 federal and state lands field survey.**
Industry-sponsored survey of 22 mines on Federal and State lands located throughout New Mexico.
- ❑ **2009 survey and engineering design contract.**
AML professional services contract for surveying, site assessment and reclamation design for 7 mines in the Poison Canyon area.
- ❑ **2009 field survey contract.**
Finalizing contract for preliminary site assessment and field survey work for approximately 30 mines located throughout New Mexico.

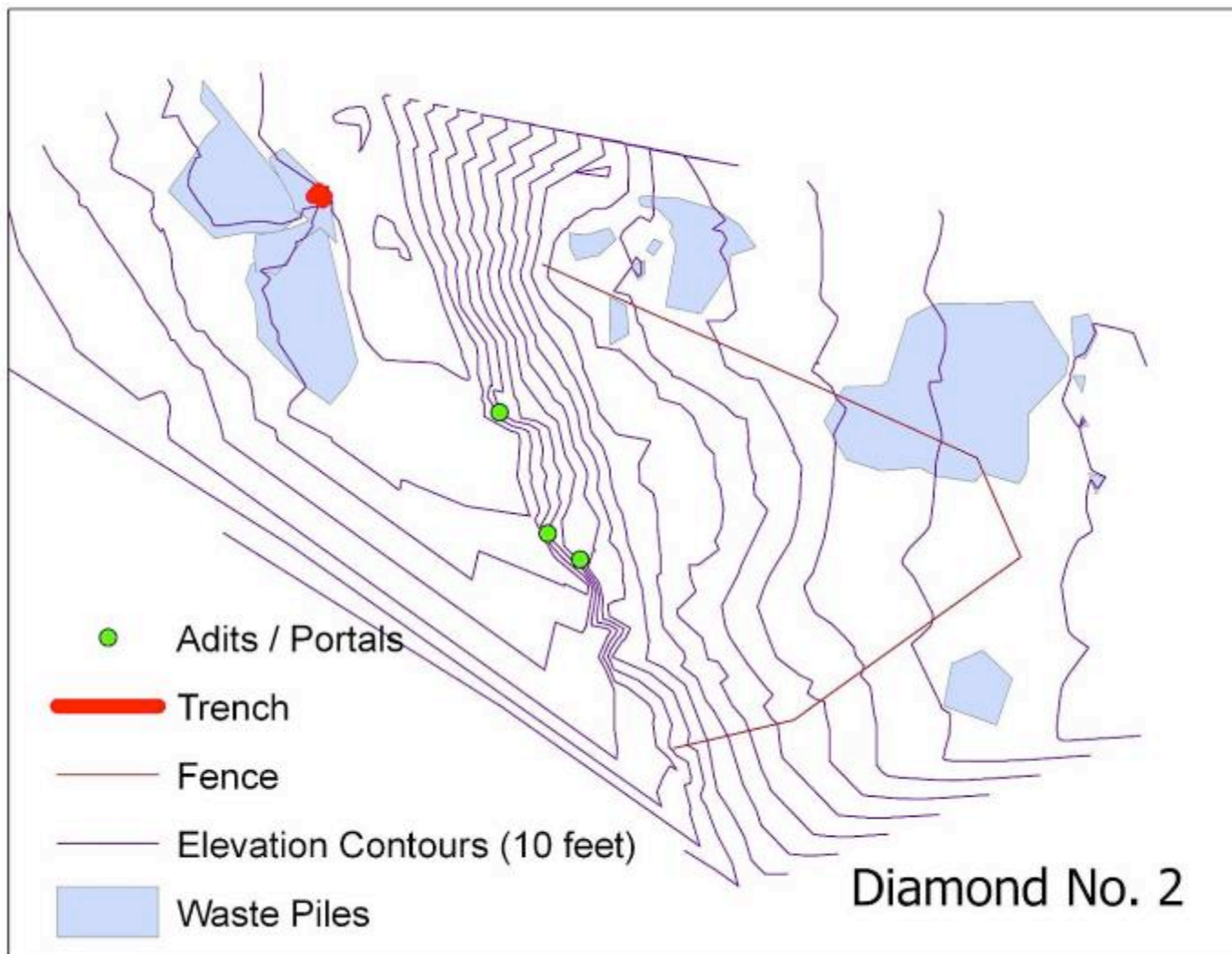
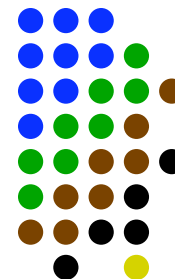
Site Prioritization



- ❑ Limited resources require prioritizing abandoned uranium mine sites.
- ❑ Multi-agency involvement on federal, state and tribal levels.
- ❑ Priority based on site factors.
 - Radiological hazards
 - Physical safety hazards (open shafts & adits, subsidence, high walls)
 - Proximity to homes
 - Proximity to domestic wells
 - Proximity to water drainages

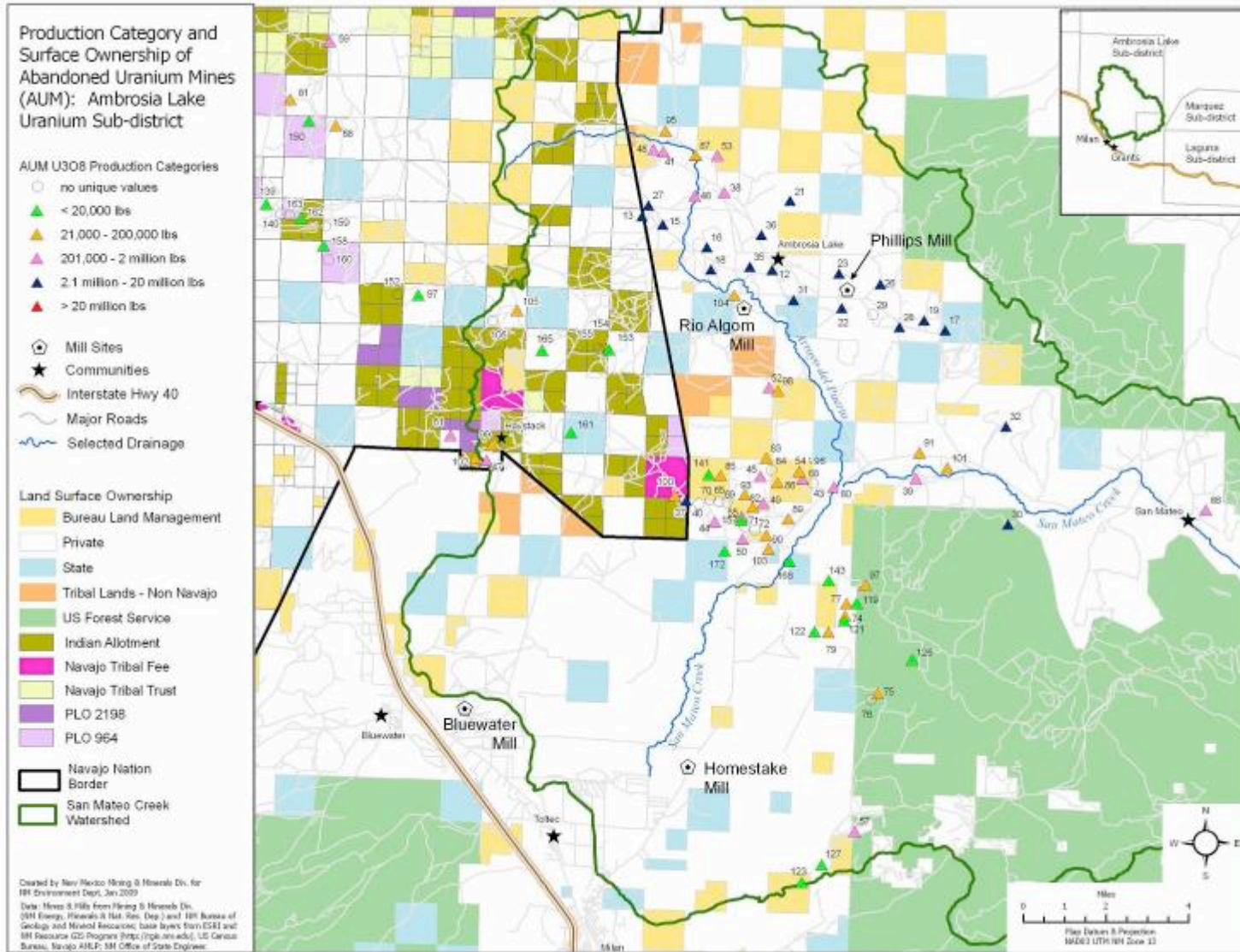
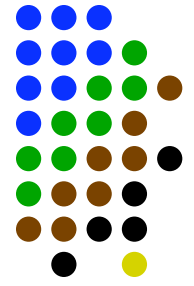


Reclamation Design

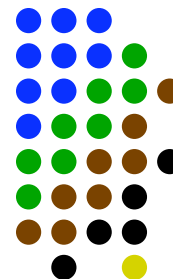


Joint project of the New Mexico Abandoned Mine Land & Navajo Nation Abandoned Mine Land Reclamation Programs

Leveraging Resources & Partnerships



Remediation, Reclamation & Clean-Up



- ❑ Continued coordination with federal, state and tribal agencies.
- ❑ Perform further site assessment and radiological surveys.
- ❑ Prioritize sites.
- ❑ Establish reclamation standards and criteria.
- ❑ Promote public participation.
- ❑ Secure funding sources for cleanup work: federal, state, tribal and private sources.