

THE ECONOMIC OPPORTUNITIES AND CHALLENGES OF URANIUM MINE CLEANUP IN NEW MEXICO

**Presentation to the Interim Indian Affairs Committee
and the Rural Economic Opportunities Task Force**

August 4, 2021

Rep. D. Wonda Johnson (District 5)

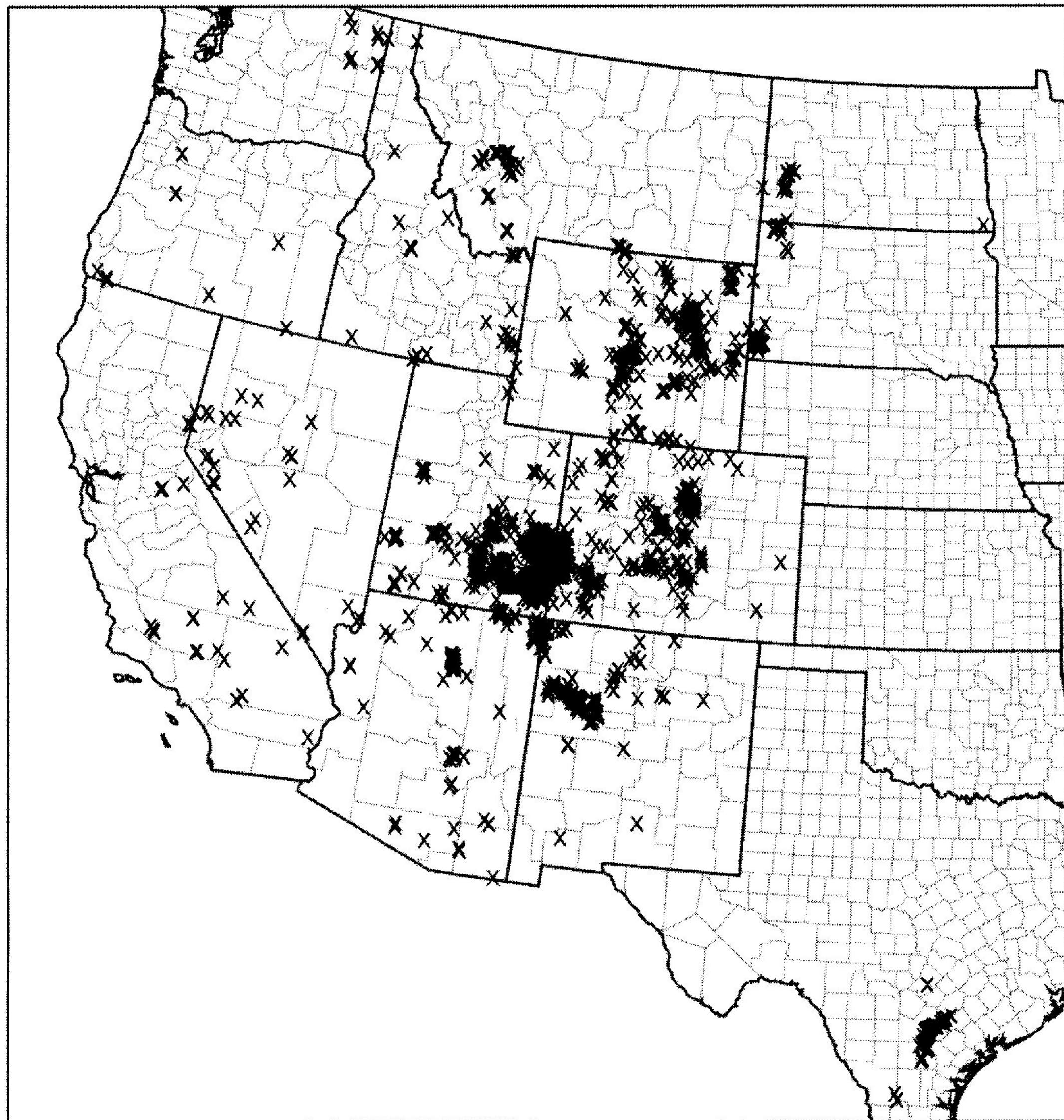
and Susan Gordon, Multicultural Alliance for a Safe Environment

Overview of Presentation

- History of Uranium Mining
- Northeast Church Rock Timeline example
- Unemployment in McKinley, Cibola and San Juan Counties
- New Mexico Target Industries
- Environmental Remediation as a new Target Industry
- How to make it happen



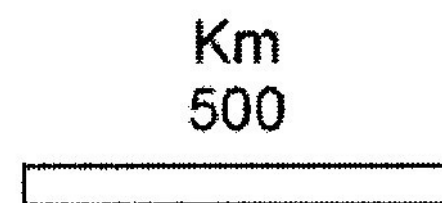
Northeast Church Rock Uranium Mine Waste Pile in Red Water Pond Road Community on Navajo Nation



Legend

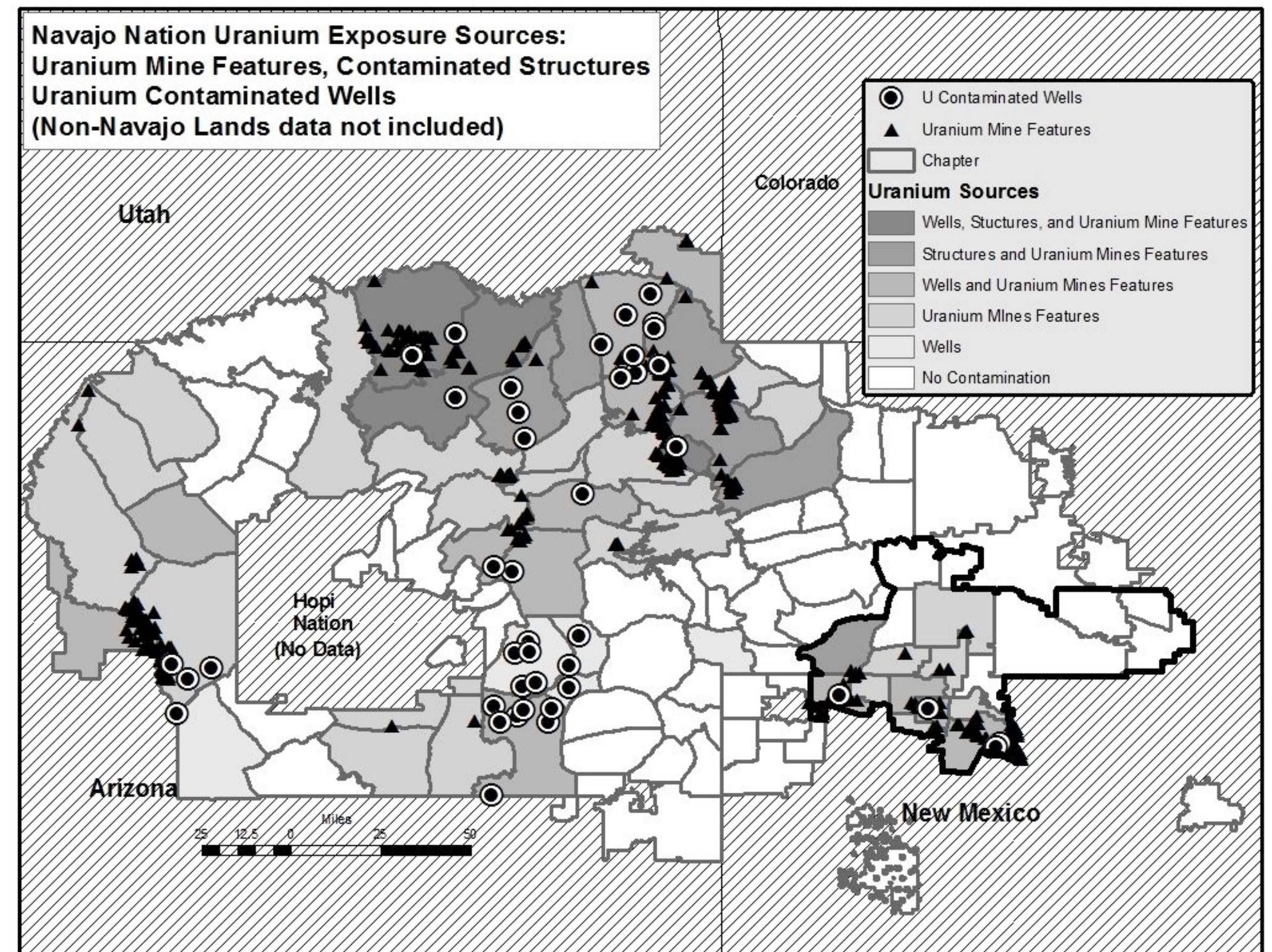
x MAS/MILS Uranium Mines

Source of Mine Information:
EPA Uranium Location Database



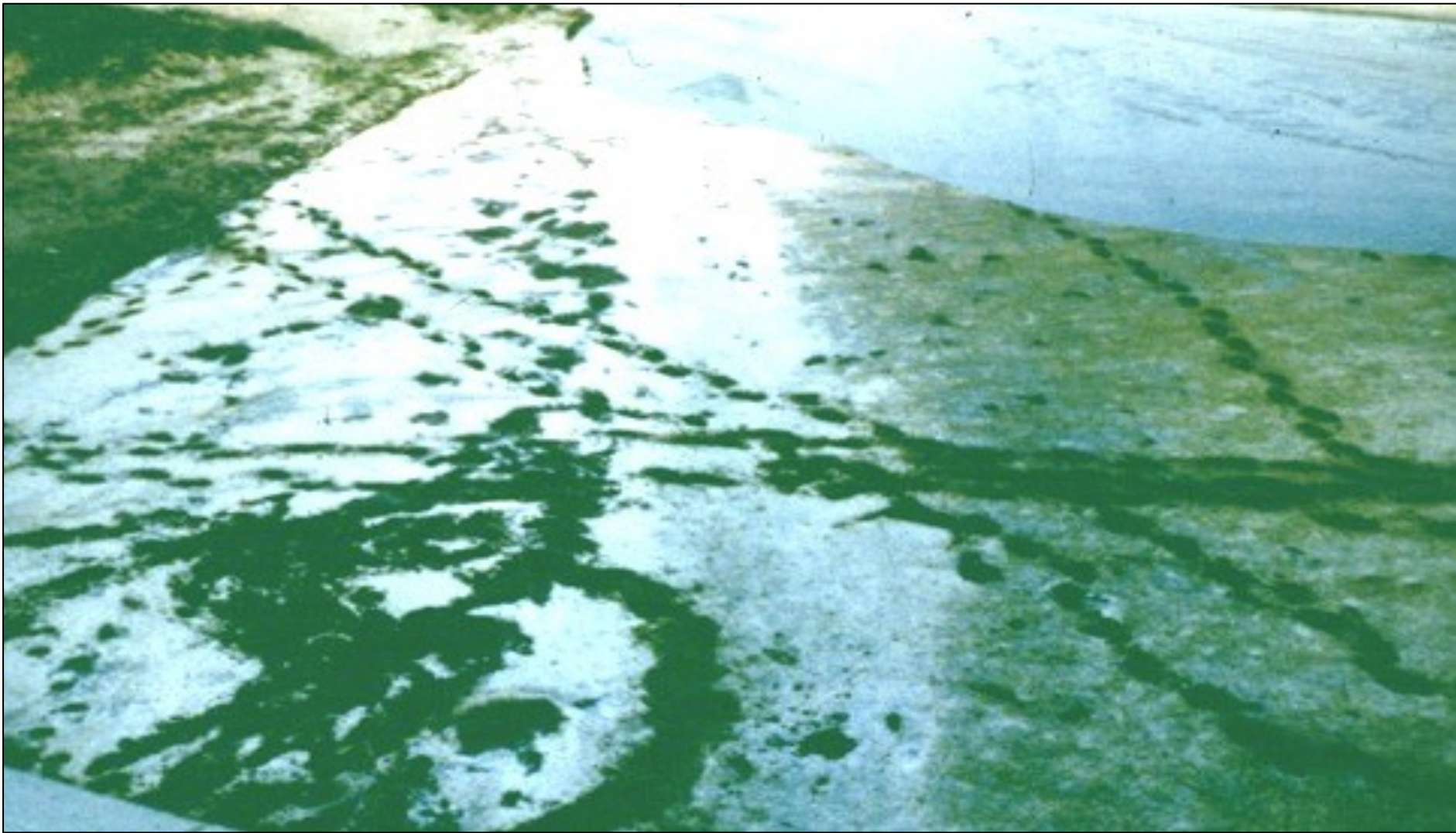
Over 15,000 Abandoned Uranium Mines (AUMs) in U.S.

Over 550 AUMs on Navajo Lands



Church Rock Uranium Mill Tailings Spill July 16, 1979

1,100 tons of radioactive uranium tailings and 94 million gallons of toxic wastewater into the Rio Puerco, contaminating the river for at least 80 miles.



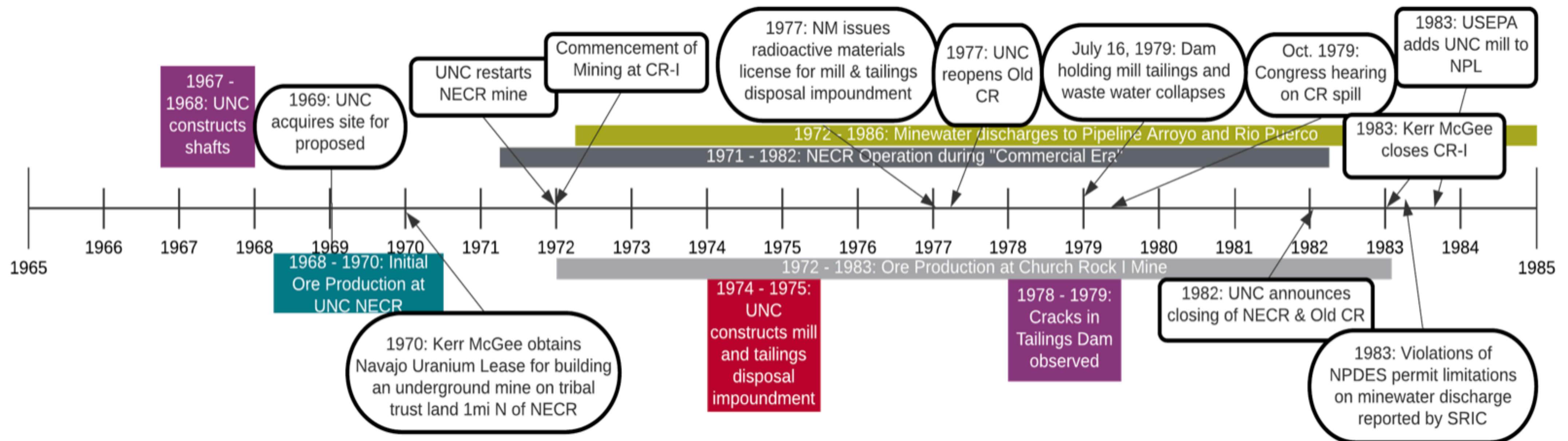
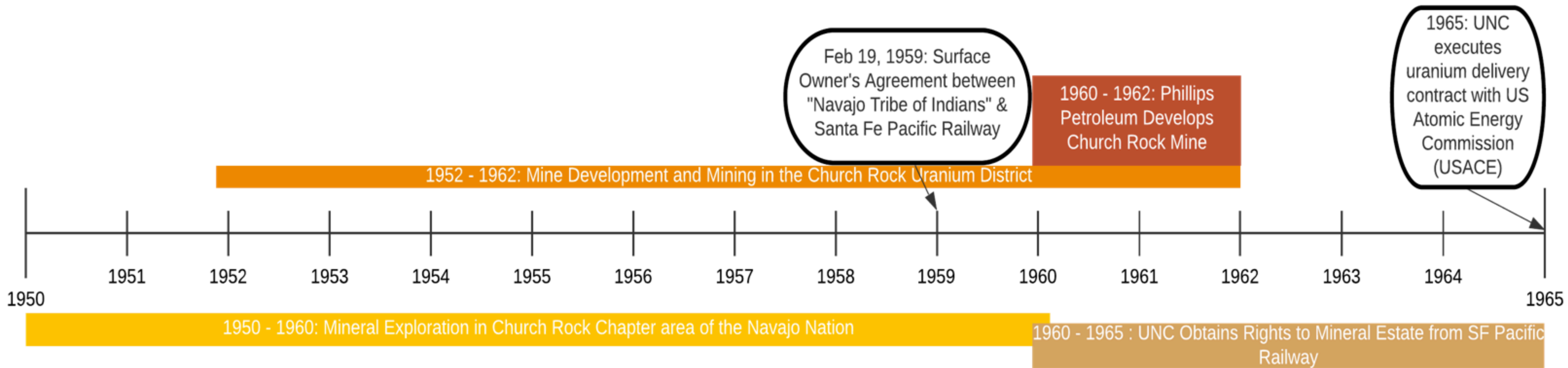
Photos courtesy of Southwest Research and Information Center, New Mexico Environmental Improvement Division, Albuquerque Journal

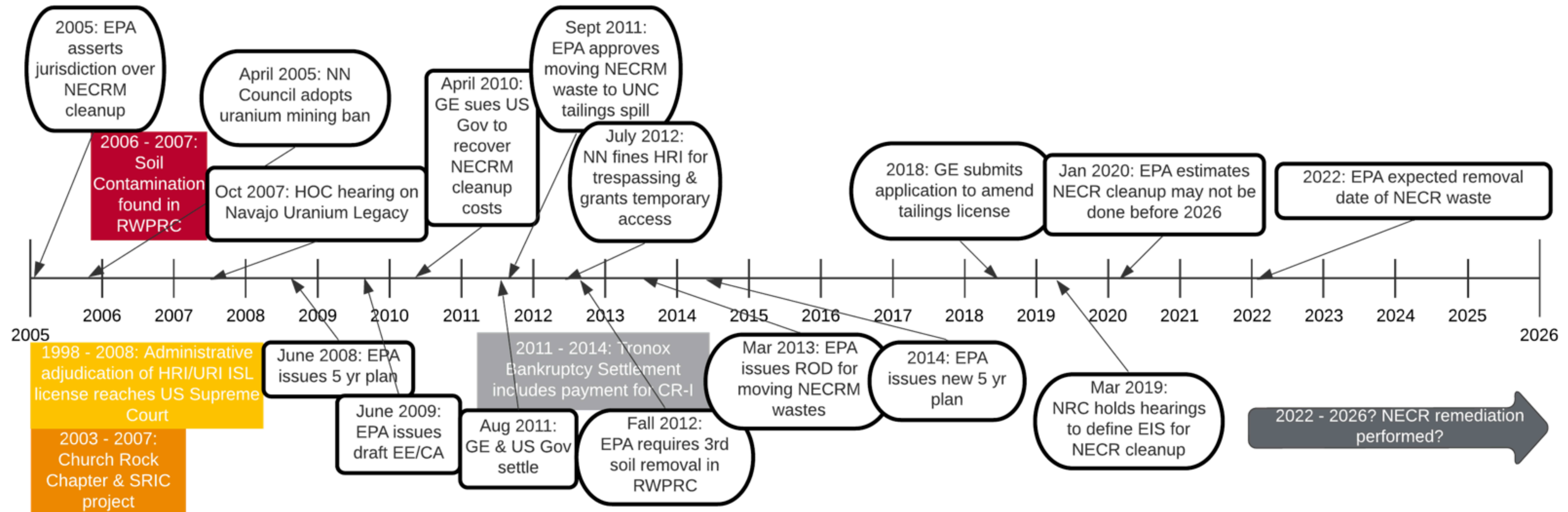
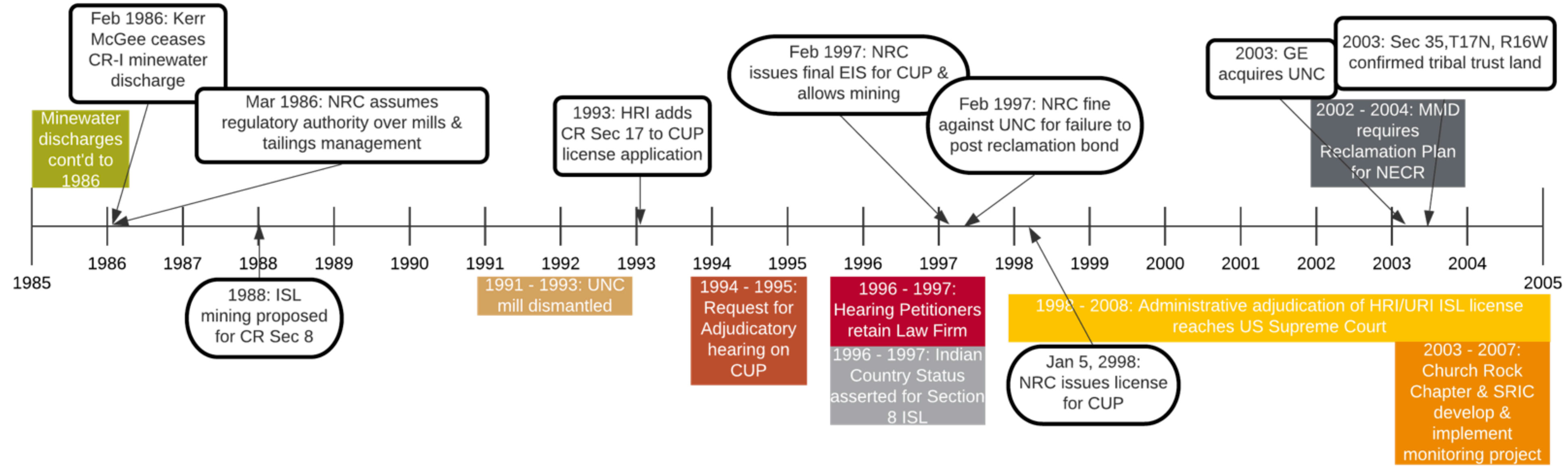
July 17, 2021

42nd Annual Commemoration of the 1979 Uranium Tailings Spill
Remains the largest release of radioactive wastes, by volume, in US history



Photos courtesy of Scott Kovac and Paul Robinson





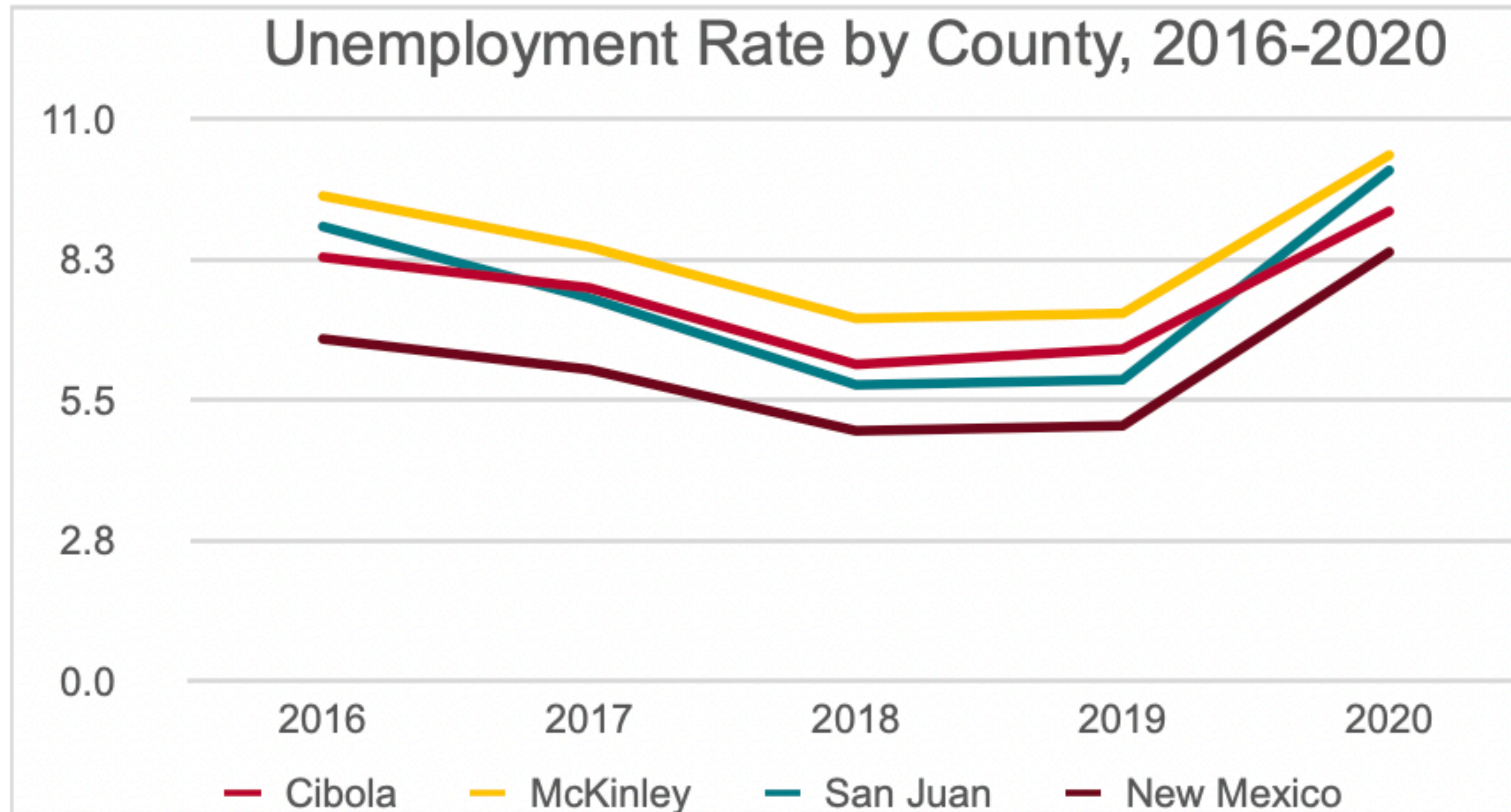
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bber.unm.edu/uranium

- University of New Mexico Bureau of Business and Economic Research (BBER) conducted research during 2019 and 2020
- Interviewed more than 75 industry professionals, educators, community members, and government employees statewide
- Developed economic projections of potential revenues and job creation for an injection of \$1 Billion into uranium remediation
- Provided a blueprint for the State to leverage existing expertise in environmental remediation and resources for workforce and business development

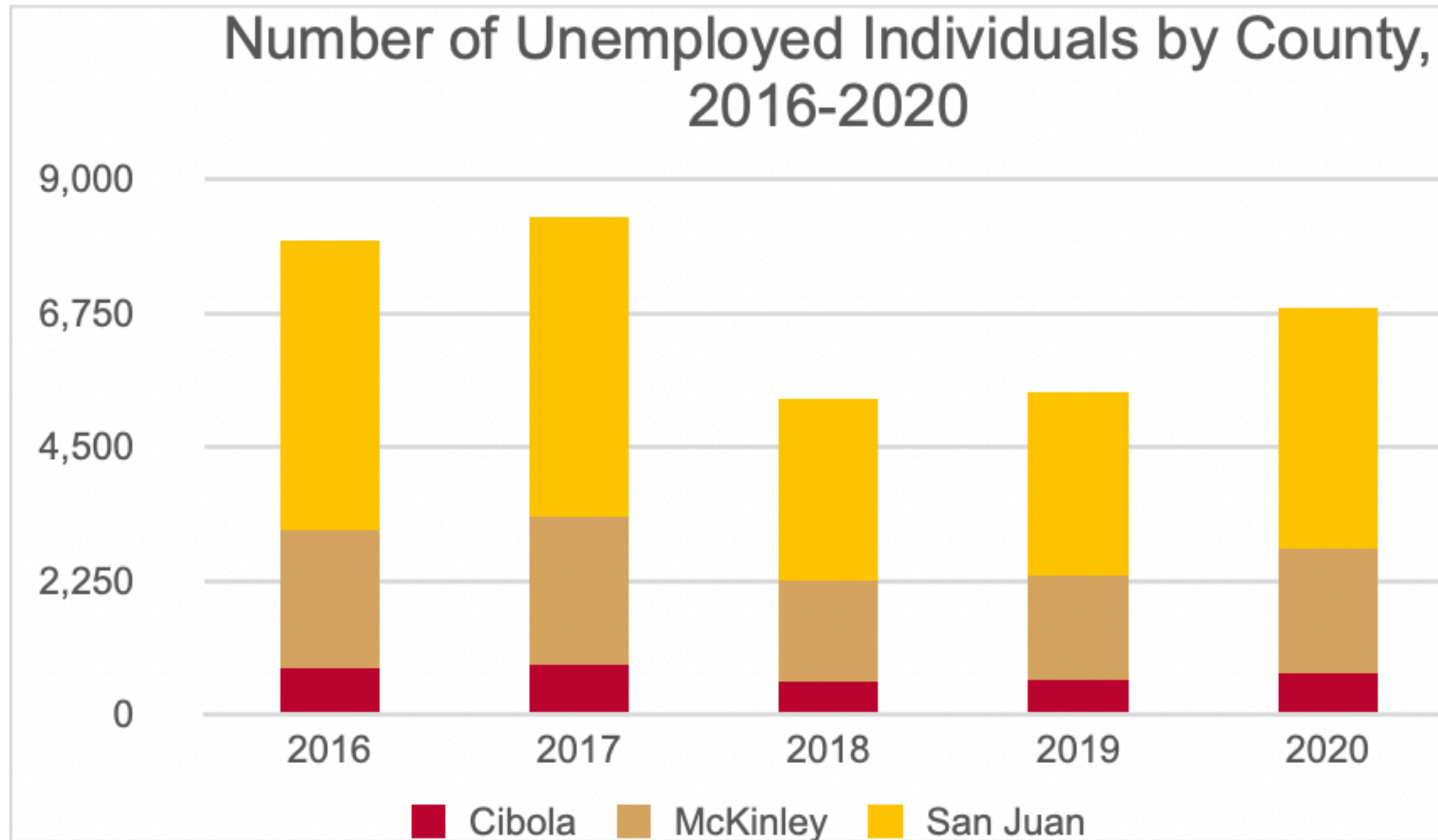
Potential Economic Benefits

- US EPA recovered \$1 billion to cleanup uranium sites on/near Navajo land in AZ and NM.
- BBER estimates that \$1 billion could create:
 - * Revenues \$177.8 million/year for 10 years for local businesses.
 - * 1,040 jobs for 10 years at an average salary of \$54,663/year.
- Some jobs would be in the trades (similar to construction), others professional.
- This includes both NM and AZ, and some will leak from the state.
- This is the tip of an iceberg – future settlements could generate far more.
- Business & workforce development for uranium cleanup can be transferred to other areas of environmental remediation.

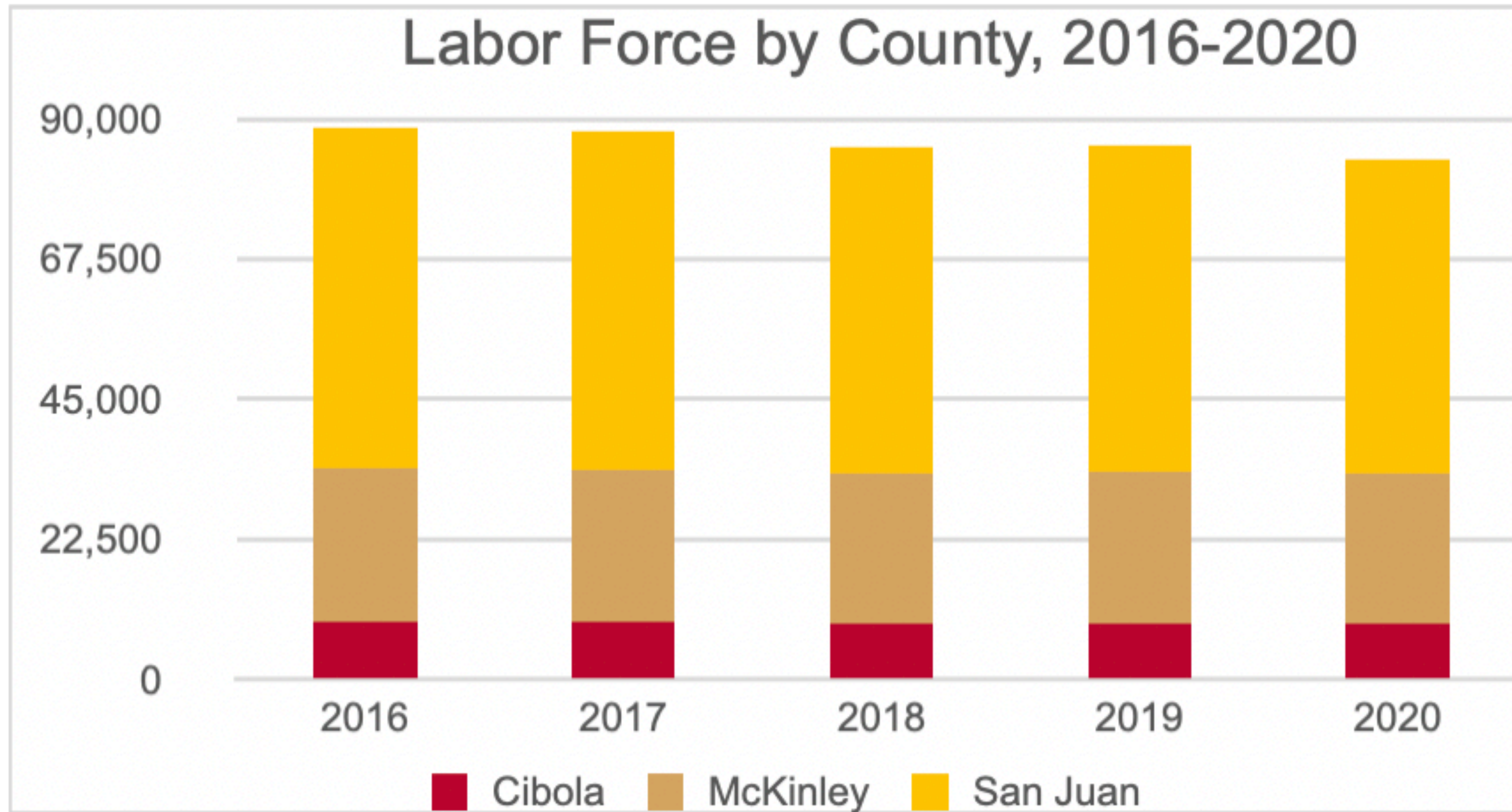


The unemployment rate in these three counties exceeded the average annual unemployment rate statewide from 2016-2020, with McKinley County reaching a rate of over 10% in 2020.

All data and definitions are from the newly updated Bureau of Labor Statistics Local Area Unemployment Statistics. <https://www.bls.gov/lau/>



The number of unemployed individuals in these counties ranges is important to illustrate the potential workforce available to take on new jobs.



“The labor force includes all people age 16 and older who are classified as either employed and unemployed. Conceptually, the labor force level is **the number of people who are either working or actively looking for work.**” Environmental remediation work will not only include the creation of new jobs, but the creation of new opportunities for existing businesses, impacting both the employed and unemployed.

¹ <https://www.bls.gov/cps/definitions.htm>

9 Target Industries in New Mexico

New Mexico Economic Development Department (NMEDD)

The target industries for the **Statewide Comprehensive Economic Development Plan**:

- Aerospace & Defense
- Biosciences
- Cybersecurity
- Film & Television
- Global Trade
- Intelligent Manufacturing
- Outdoor Recreation
- Sustainable Agriculture
- Sustainable & Green Energy



NM Economic Development Department's plan is focused on workforce and innovation.

https://gonm.biz/uploads/documents/Statewide_Plan_COGS.pdf

Environmental Remediation—a 10th Target Industry

Environmental remediation is emerging as a growth industry for the 21st century.

- Prioritization of uranium mining remediation can be leveraged for other remediation opportunities and could create a significant new business sector
- NM already has expertise in nuclear materials, mining, engineering, health, legal, and legislative matters
- NM could develop a skills list for businesses and individuals trained to do uranium mine cleanup work and help grow our educational programs alongside our businesses



Abbreviated Summary of Business Conversations with BBER on Hiring

Assuming money for cleanup, easy to access training in place, and businesses aware of Requests for Proposals when released:

- Small-to-medium local businesses have employees for small-scale remediation activities (fences, road building, surveying, etc.).
- A State agency or other entity could provide OSHA training to colleges and small businesses.
- Some larger businesses suggested they would hire locally trained workers should clean up efforts increase and more funds roll in. Local OSHA- trained workers are more likely to be hired.
- There will be a need for offsite workers such as technical writers, laboratory analysts, project managers, etc.

Current Small Business Assistance

New Mexico Small Business Development Center Network, provides counseling, training and technical assistance at 18 service centers and 9 satellite offices statewide.

<https://www.nmsbdc.org/>

Also administers 6 Federal **Procurement Technical Assistance Centers**, a U.S. Department of Defense program: Santa Fe (2), Albuquerque (2), Clovis & Las Cruces. <https://www.nmptac.org/>

- Lead center at Santa Fe Community College, 18 service centers at two-year colleges statewide-major funding through grant from US SBA; 9 satellite offices provide counseling and technical assistance in general business planning and development, financing, government contracting, international trade, environmental regulation, and technology commercialization
- International Business Accelerator (IBA) in Santa Theresa in conjunction with Western New Mexico University and Technology Commercialization Accelerator (TCA) at New Mexico Tech

Current Funding Sources

Navajo Nation/Environmental Protection Agency - Settlements

- \$917 million for cleanup of 54 uranium sites
- \$92 million for the Quivera Mine site
- \$45 million for Shiprock Uranium Mill site

Reclaim Degraded Lands (\$29.5 billion), Sen. Heinrich amendments to Infrastructure Bill:

- **Fund \$16 billion for the cleanup, reclamation, and restoration of abandoned coal, hard rock, and uranium mines, and on Federal, State, Tribal, and private lands (BLM).**
- **Fund \$8 billion for plugging and reclaiming thousands of orphaned onshore oil and gas wells on Federal, State, Tribal and private lands (BLM).**
- **Fund \$5 billion for the remediation and redevelopment of brownfield and Superfund sites.**
- Fund \$1.5 billion for Appalachian Regional Commission priority restoration/revitalization projects.
- Support coal workers by enacting the Black Lung Benefits Disability Trust Fund Solvency Act and Protection of Social Security Benefits Restoration Act.

San Mateo Creek Basin cleanup has been recommended as a Superfund site. Currently undergoing analysis to determine what cleanup will be needed and how much it will cost.

Workforce Development and Training Programs Already in Place

- Bureau of Mine Safety, provides Mine Safety and Health Administration (MSHA) trainings across New Mexico, <http://www.bmi.state.nm.us/navContact.htm>
- Diné College's Uranium Education Program (UEP), https://www.dinecollege.edu/about_dc/uranium-education-program/. UEP students work with community members to research and rectify environmental health issues arising from the legacy of uranium mining on the Navajo lands.
- Navajo Technical University's (NTU) Environmental Science & Natural Resources Department, <http://www.navajotech.edu/academics/bachelor-of-science/environmental-science-natural-resources>
- Conducts uranium mine assessments, provides uranium remediation training, and health and OSHA training thru federally funded Community College Consortium for Health and Safety Training <https://nationalpete.org/ccchst/>.
- Greater Gallup Economic Development Corporation (GGEDC), developed industrial workforce programs with employers, <https://www.gallupedc.com/>.
- New Mexico Clean Energy Workforce Study (June 2020) https://www.dws.state.nm.us/Portals/0/DM/LMI/NM_Clean_Energy_Workforce_Report.pdf

Recommendation from BBER Report: Create a Central Repository for Information

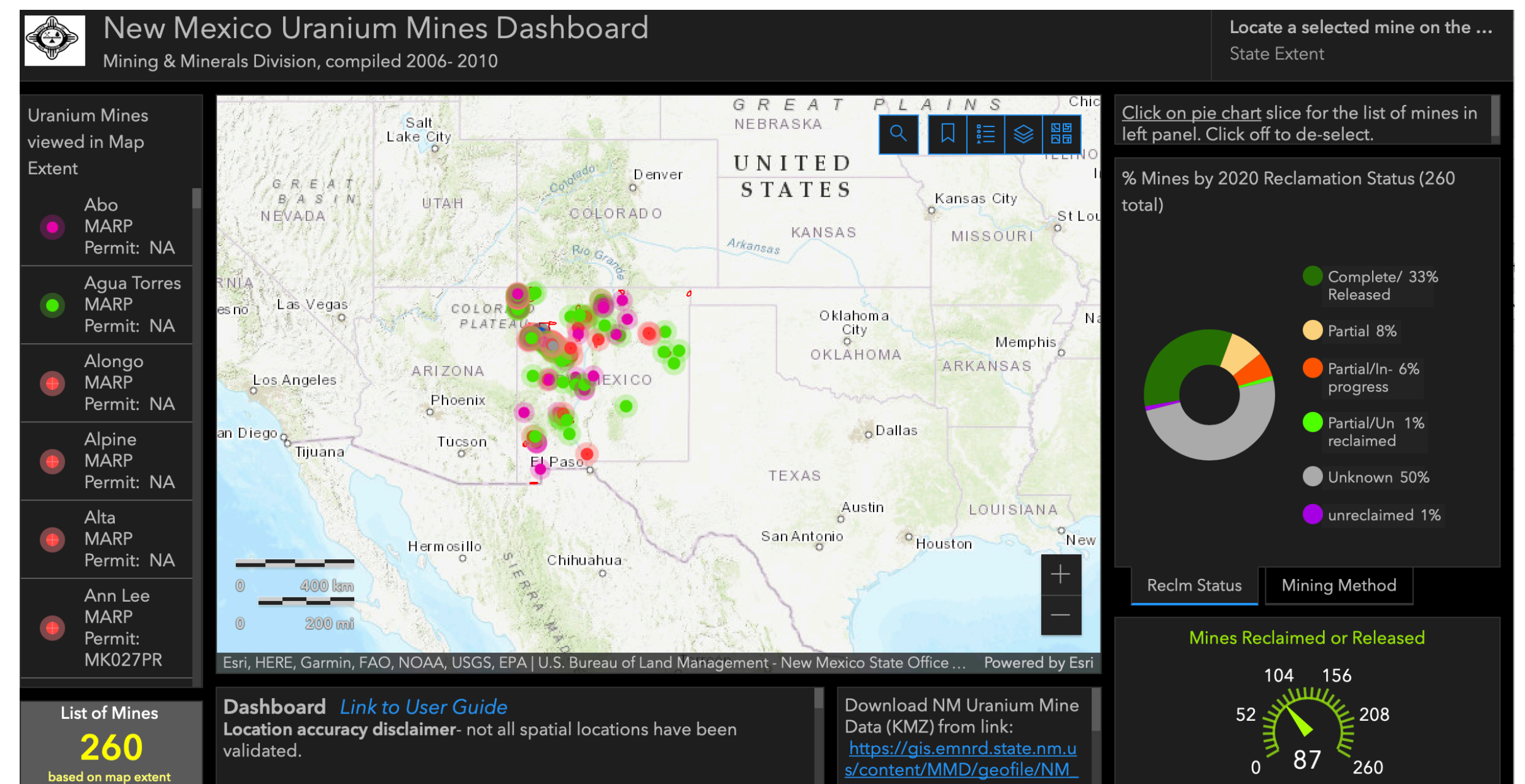
The state needs to create a clearinghouse for all documentation related to uranium mining, employment, remediation, ownership, and land status.

- **Uranium Mines Dashboard** created by the Energy, Minerals and Natural Resources Department (EMNRD) <https://www.arcgis.com/apps/dashboards/91f296cb3ea24f689329eb5075ec3bb7>

We need similar resources for other extractive industries like coal, hard rock mining, oil and gas.

- **New Mexico Environmental Review Tool**
https://nhnm.unm.edu/data/nm_ert

HB51 Environmental Database Act -
Expands NM Environment Review Tool,
managed by Natural Heritage Division of
Museum of SW Biology



What can the Committee Do?

We need your:

- ◆ Leadership to bring New Mexico Economic Development Department on board with prioritizing Environmental Remediation as a target industry.
- ◆ Your guidance on how to develop this industry with respect for tribal sovereignty and culture.
- ◆ Your knowledge of additional resources and initiatives to leverage or join.
- ◆ Your suggestions about possible bills or memorials for the 2022 Regular Legislative Session.
- ◆ Ongoing oversight of progress on the various recommendations and ultimately remediation in affected communities.



BUREAU OF BUSINESS
& ECONOMIC RESEARCH

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