



Arizona Mining

The Canada Arizona Business Council

Francis McAllister
Chairman
Arizona Mining Association



The Arizona Mining Association

- Organized in 1965 with 13 original members
- Grew in membership to 27 members in the 1980's
- As a result of mergers & acquisitions and difficult economic conditions membership dropped to 3 companies during 2002 - 2003 time period
- Today the AMA membership is 40 companies reflecting more favorable times and growth in the mining industry
- Member companies include leaders in:
 - Copper
 - Coal
 - Gold
 - Silver
 - Uranium
 - Potash
 - Professional Services





Governing Principles

Mission

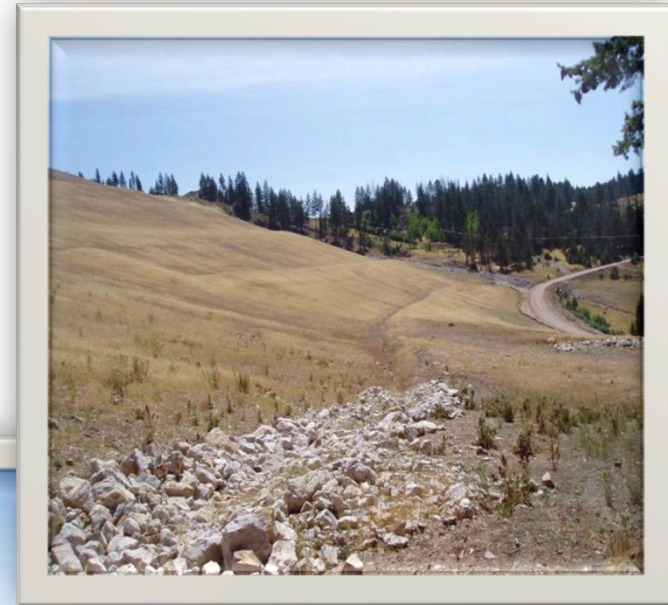
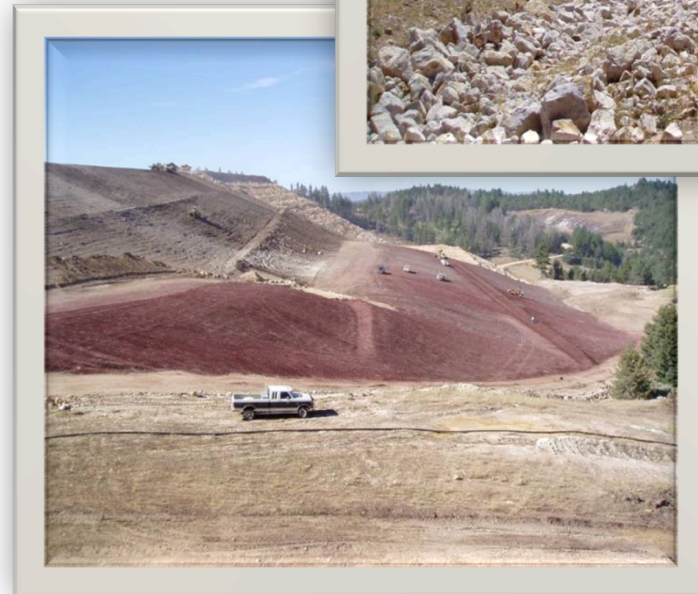
To be **the primary advocate of the Arizona mining industry** through promoting sound public policy at all levels of government, educating the public about the benefits of mining and supporting the sustainability of a safe and responsible mining industry

Vision

We are a diversified mining association that is the unified voice of responsible, sustainable and safe mining in Arizona. We support educational programs that demonstrate the importance and benefits of mining to the economy and the quality of life. Our members benefit from productive relationships and alliances with government, business associations and natural resource industry groups. **We help Arizona to be the premier location for mining investment in the U.S.**

Commitment to Safety & Environment

- More than 2.6 million acres of mined lands have been restored
- Reclamation
 - Wildlife Sanctuaries
 - Range Land for Cattle
 - Research Facilities



Member Companies

- Alliance Mining
- American Bonanza
- Asarco
- BHP Billiton
- Carlota Copper
- Curis Resources
- Energy Fuels
- Excelsior Mining
- Freeport McMoRan
- Golden Vertex
- Granite Construction
- Lhoist
- Liberty Bell Resources
- Mercator Minerals
- Mining Environmental
- MinQuest
- Mojave Desert Minerals
- Oracle Ridge Copper
- Peabody Energy
- Placer Mining Corp.
- Prospect Global Resources
- Quaterra Resources
- Redhawk Resources
- Resolution Copper Mining
- Rosemont Copper
- Swallow Mining
- Uranium One
- Vane Minerals
- Wildcat Silver
- Brown & Caldwell
- Brownstein Hyatt
- CDM Smith
- Fennemore Craig
- Gallagher & Kennedy
- GovGroup LLC
- Haley & Aldrich
- McGuire & Pierce
- Polsinelli Shughart
- Ryley, Carlock & Applewhite
- Snell & Wilmer

Mining in Arizona

- 5 economic C's of Arizona (cotton, cattle, climate, citrus, copper)
- Copper Belt (Morenci, Resolution, Ray, Rosemont, Curis)
- New opportunities
 - Potash – in permitting
 - Gold – last 3 years
 - Silver – in permitting
 - Uranium – last 5 years
- Excellent potential for additional exploration (AZ Geological Survey)
- Government view on mining
- Attractive to foreign and domestic investment
 - US mining companies (Freeport, Peabody, Asarco)
 - Non US companies from; Australia, UK, Mexico, Poland, South Africa, Canada



Arizona Major Mines





Global Industry Challenges

- Difficult to Discover Large Scale Ore-bodies
- Cost Escalation and Scarce Raw Materials
 - Energy, Labor, Equipment, Tires, etc.
- Resource Depletion, Declining Grades
- Political Risk – Growing Economic Nationalism
- Regulatory/Environmental Issues
- Technical Challenges
 - Low Grade Deposits, More U/G Mining
 - Lack of In-house R&D Capabilities
- Workforce Development

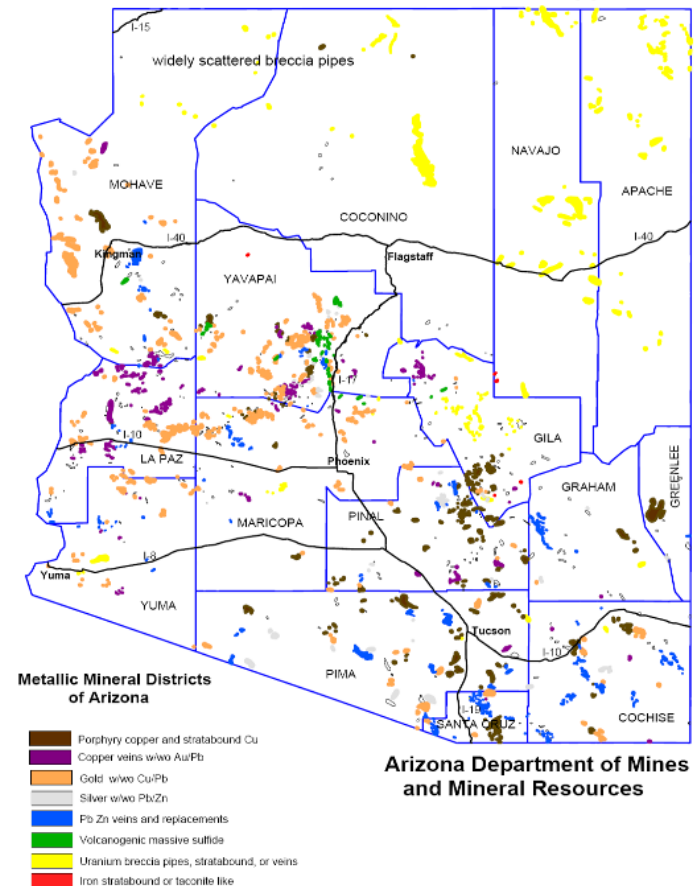


What Arizona Delivers Against Challenges

- | | | |
|---|---|--|
| • Difficult to Discover Large Scale Ore-bodies | → | • Discovery of large ore-bodies |
| • Cost Escalation and Scarce Raw Materials | → | • Stable supply chain with significant mining companies providing a base for suppliers |
| • Resource Depletion, Declining Grades | → | • Experience in mining of lower ore grades |
| • Political Risk – Growing Economic Nationalism | → | • Stable and supportive Arizona state government |
| • Regulatory/Environmental Issues | → | • Good working relationship with ADEQ |
| • Technical Challenges | → | • In house R&D and experience in underground and low grade mining |
| • Workforce Development | → | • Experienced and stable workforce |

Arizona - More Than Copper

- Coal, gold, silver, uranium:
 - \$318 million in economic impact
- Gems: 3rd largest gem producer in US
 - \$2 million
- Gold
 - Gold Road Mine Aug 2010
 - Copperstone 2011
- Potash: Holbrook Basin
 - 1 billion tons potash
- Pumice: #1 producer
 - \$5-6 million
- Uranium: If developed
 - 1,000 new jobs
 - \$40 million payroll
 - \$14 billion/20 years
 - \$952 million federal/state income tax
 - \$80 million state severance tax



**Arizona Department of Mines
and Mineral Resources**

Mining's Impact on Arizona's Economy in 2011

- Direct and Indirect impact: \$4.6 Billion
 - Produced \$3.2 billion in personal income
 - Generated 49,800 Arizona jobs
 - Generated \$0.5 billion in state/local taxes
- Arizona Mining Employers
 - Directly employed 11,300 state residents
 - Average mining compensation: \$108,000 vs. \$47,000 for all workers in state
- Arizona Copper Mining
 - 751,000 metric tons produced in 2011; 68% of total U.S. copper production
 - Our state production is ranked 6th in the world vs. copper producing nations



Source: L. William Seidman Research Institute, W.P. Carey School of Business, Arizona State University

Canadian Exploration Companies in Arizona

- 53 Canadian companies are currently exploring for minerals in Arizona
 - Copper, Silver, Gold, Uranium, Potash
- Some of these companies are past the exploration phase and have moved well into the permitting phase
 - Permitting can become very cumbersome for greenfield projects
 - Considerable time delays have been experienced
 - Cost associated with the time delays are very burdensome
- Curis Resources, Rosemont Copper, Uranium One, Quaterra Resources have all experienced substantial delays to their greenfield projects
- Stay the Course

Potential to Benefit the AZ Economy

- Canadian Mining Companies own strong mining resources in Arizona
- If Canadian owned properties in Arizona that are ready for development are developed now:
 - Could add billions to the state economy
 - Could add a significant amount of high paying jobs
- Current Canadian exploration efforts provide employment and future mining projects
- Canadian firms bring a long tradition of understanding of mining to the state of Arizona

Conclusion

- AMA is growing and has a very solid membership with a good representation from Canadian Mining Companies
- The industry is committed to safety and the environment
- Mining plays a significant role in the Arizona economy
- Canadian mining companies are a significant contributor to the Arizona economy
- Could play a bigger part in the Arizona economy if permits were issued in a more timely manner

To Understand More About Mining

- Contact the AMA or any of its members
- Come to the monthly mining caucus meetings held at the state capital during session
- Attend the monthly Mining Alliance meetings in Tucson
- Visit the AMA's website at www.azmining.com
- Call 602-266-4416





Questions?